

RACE, RESOURCES, AND INCOME PROFILES

Data Visualization of Census Tracts in Spartanburg



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Racial Composition

<i>Racial Composition Categories¹</i>		
Category	Map Color Code	Description
<i>Intensely Minority</i>		90-100% Non-White
Minority Identifiable		70-89% Non-White
Majority Minority		50-69% Non-White
Majority White		50-69% White
White Identifiable		70-89% White
Intensely White		90-100% White

¹ The racial composition categories are derived from the research of Gary Orfield on school segregation in which racial compositions were based on select schools. In a 2005 report titled *Why Segregation Matters*, Gary Orfield and Chungmei Lee outlined six racial composition categories including predominantly minority (> 50% Minority), intensely segregated minority (> 90-100% Minority), extremely segregated minority (>99% Minority), predominantly white (> 50% White), intensely segregated white (> 90-100% White), and extremely segregated white (> 99% White). In a 2006 report by the same authors, *Racial Transformation and the Changing Nature of Segregation*, school racial composition categories were collapsed and nominally modified to include majority minority (50-100% Minority), majority white (50-100% White), and intensely segregated minority (90-100% Minority).

In the present racial composition categories, the distinctions were drawn to show how communities appear spatially in a city. Intensely minority, intensely white, minority identifiable, and white identifiable census tracts (or communities) have clear racial characters. Some of these communities may have been formed at the height of Jim Crow, state-sanctioned segregation while others may have been shaped by de facto, social segregation or policy (e.g., “white flight”, urban renewal). The categories also distinguished between racially identifiable communities and those that are majority white or majority minority. A majority composition is often demographic not necessarily the result of racial customs or Jim Crow segregation. As a result, majority white and majority minority census tracts can be considered “diverse” in that you will have considerable White and minority populations in both racial compositions. In some cities, these non-racially identifiable communities may serve as buffers between identifiable White and minority communities.

Median Income Quintiles

<i>Median Income Quintiles</i> ²		
Category	Map Color Code	Description
Lowest		Lowest in Southeast
Low		Low compared to Southeast
Mid-Tier		Average compared to Southeast
High		High compared to Southeast
Highest		Highest in Southeast

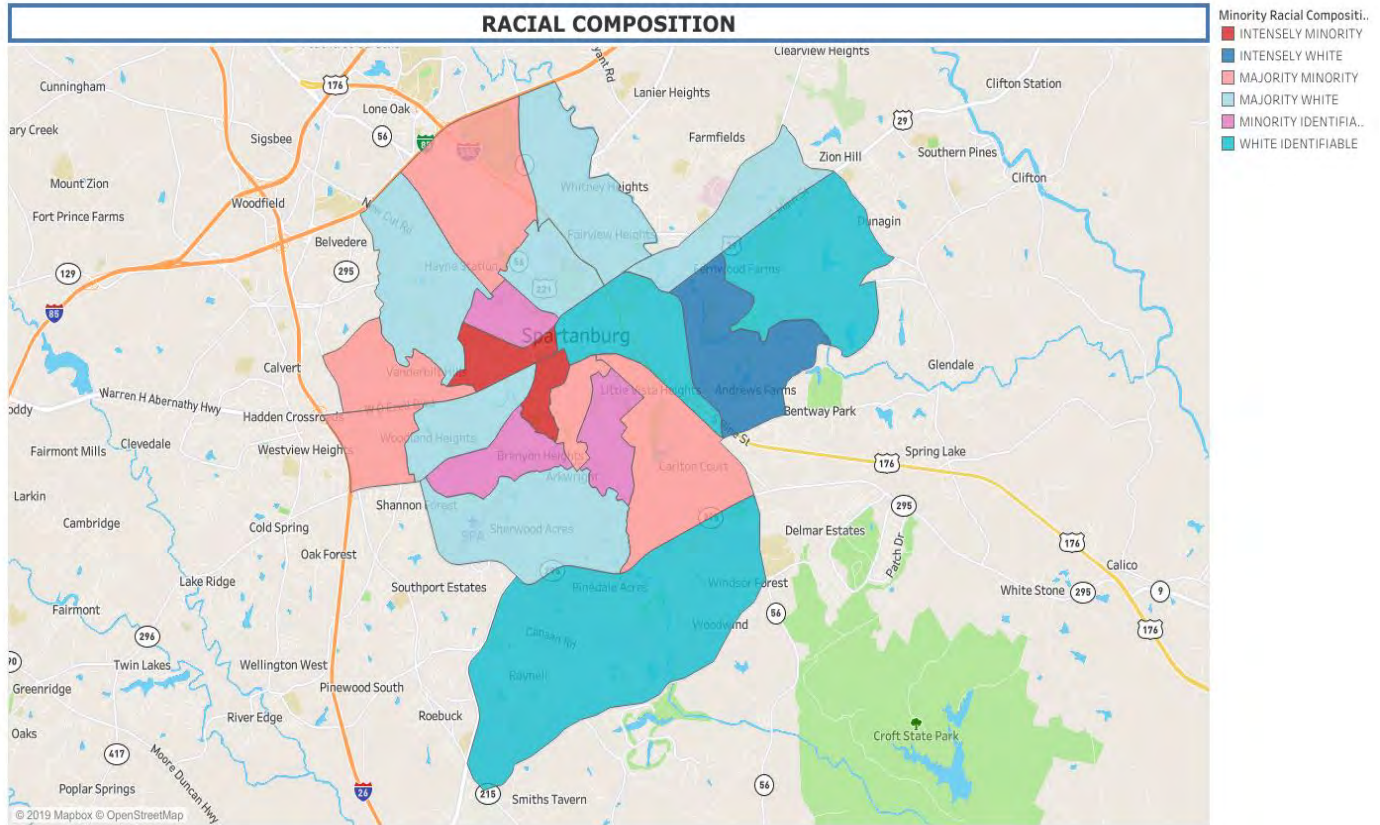
² Median income quintiles are based on the B19013 Median Household Income table from the American Community Survey's 2013-2017 5-Year Estimates. County median household incomes were collected from the 616 counties in Alabama, Florida, Georgia, Mississippi, North Carolina, Tennessee, and South Carolina. The median household income across the counties was \$40,673 with a standard deviation of \$10,379.55. Using the median, standard deviation, and county median incomes, z-scores were calculated. Z-scores were used to divide the area under a normal distribution curve such that each quintile would make up 20% of the curve. The use of median income quintile in a city allows the comparison of census tracts or communities to the Southeastern United States. In the present report, this is used to gauge community socioeconomic status. Census tracts in the lowest and low quintiles can be considered low socioeconomic status communities, mid-tier can be interpreted as middle-class, and high and highest quintiles are affluent.

Food Desert and Grocery Amenities

<i>Food Deserts/Grocery and Amenities</i> ³		
Yes/No	Food Desert Color Code	Grocery and Amenities Color Code
Yes		
No		

³ Food desert designations were based on data collected by census tract by Alana Rhone for the Economic Research Service at the U.S. Department of Agriculture in the 2017 report *Low-Income and Low-Supermarket-Access Census Tracts, 2010-2015*. Food deserts are defined as low-income, low-access tracts at 1 and 10 miles. Grocery and amenities are census tracts with either a Bi-Lo, Ingles, Walmart, Food Lion, Publix, Whole Foods, Kroger, or Starbucks. These supermarkets consider the local context of Spartanburg. The foundation for this K. Wayne Yang's article *The Postcolonial Ghetto* in which he argued that white, affluent areas of Oakland, California could be identified financial institutions, supermarkets, and Starbucks locations. The article utilized a series of maps to show "white pure space" away from identifiable African American neighborhoods (indicated by census block groups). In *Geospatial Mapping of Community Socioeconomic Status with Publix and Whole Foods Locations*, Carter explored the relationship between community socioeconomic status and the two supermarket chains. Examining three South Carolina counties (Charleston, Greenville, and Richland), it was found that the supermarkets were overwhelmingly located in middle-class to affluent census tracts. Furthermore, no census tract with either a Publix or Whole Foods location was classified as low education tract (20%+ of the population age 25 or older lack a high school diploma).

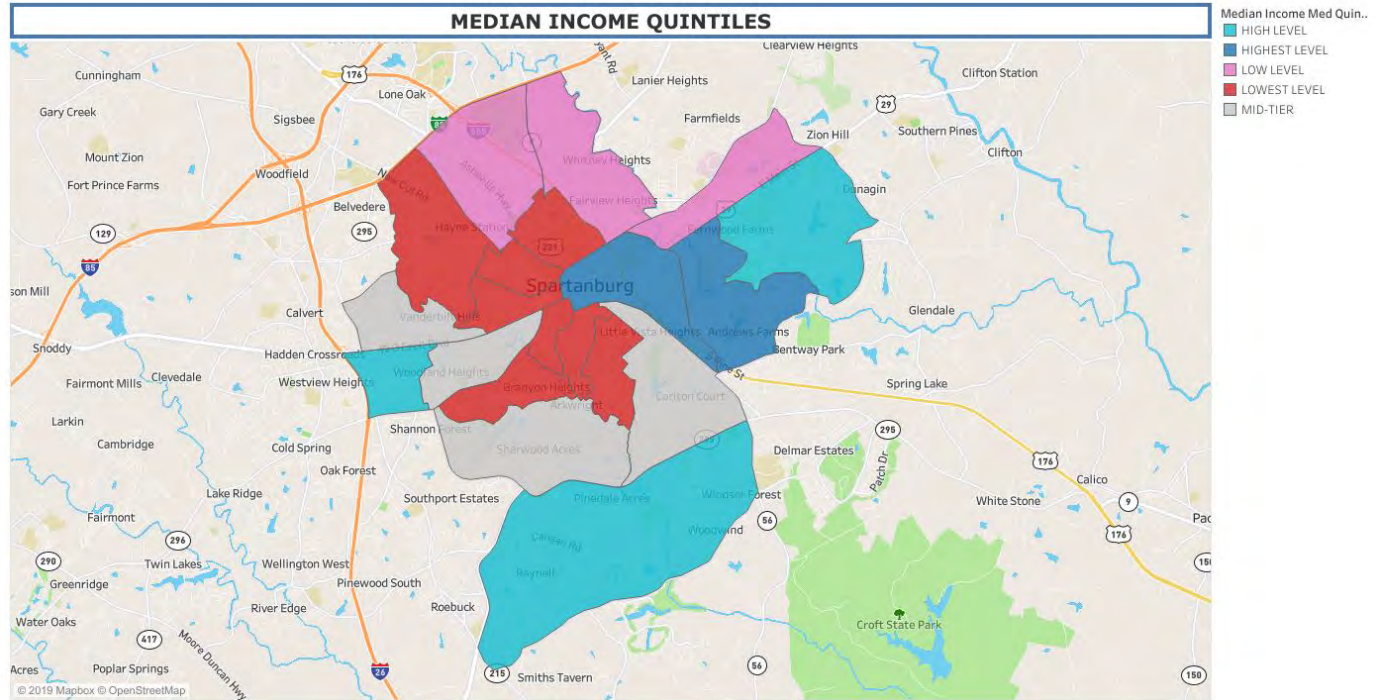
Racial Composition Map



Racial Composition Category ⁴	# of Tracts
Intensely Minority	2
Minority Identifiable	3
Majority Minority	5
Majority White	6
White Identifiable	3
Intensely White	1
Total	20

⁴ Racially identifiable white communities are clustered in the eastern and northeastern portions of the city, and racially identifiable minority communities are clustered in the northwest, west, southwest and southern areas of the city. Apart from the central area of the city, non-racially identifiable majority white and majority minority communities buffer white racially identifiable and minority racially identifiable communities. The sole intensely segregated white community is buffered on all sides by either white identifiable or majority white communities. There is also a white identifiable community at the southernmost tip of the city limits that is also buffered from minority identifiable communities by two non-racially identifiable communities. See Appendix A to observe connections between present-day racially identifiable communities and historic census data. See Appendix B to observe African American racial clustering.

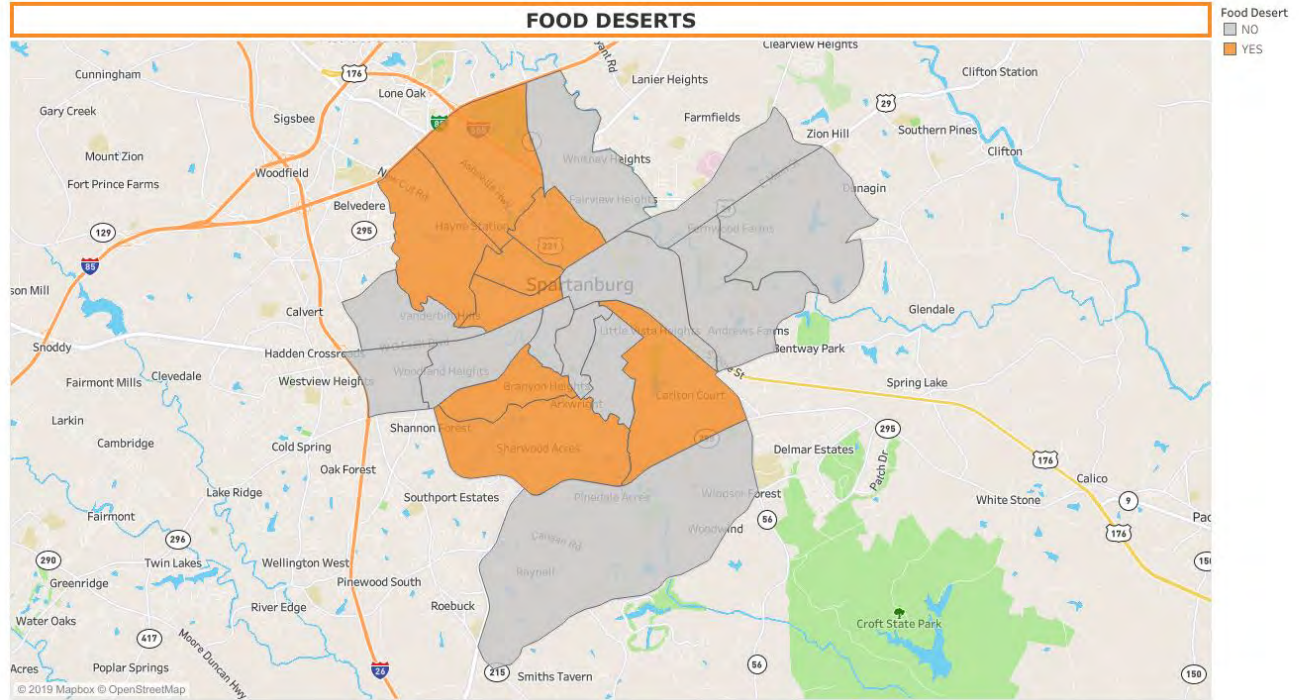
Median Income Quintile Map



Median Income Quintile ⁵	# of Tracts
Lowest	8
Low	3
Mid-Tier	4
High	3
Highest	2
Total	20

⁵ Communities in the high and highest median income quintiles as compared to the Southeast are clustered in the east and northeast with two standalone communities at the easternmost and southernmost tracts of the city limits. Mid-tier or middle-class income communities appear to be buffers between communities in the high or highest quintiles and those in the low- and lowest-income quintiles. The clusters of communities in the low- and lowest-income quintiles are clustered in the northwest, northern, southwest, and southern portions of the city.

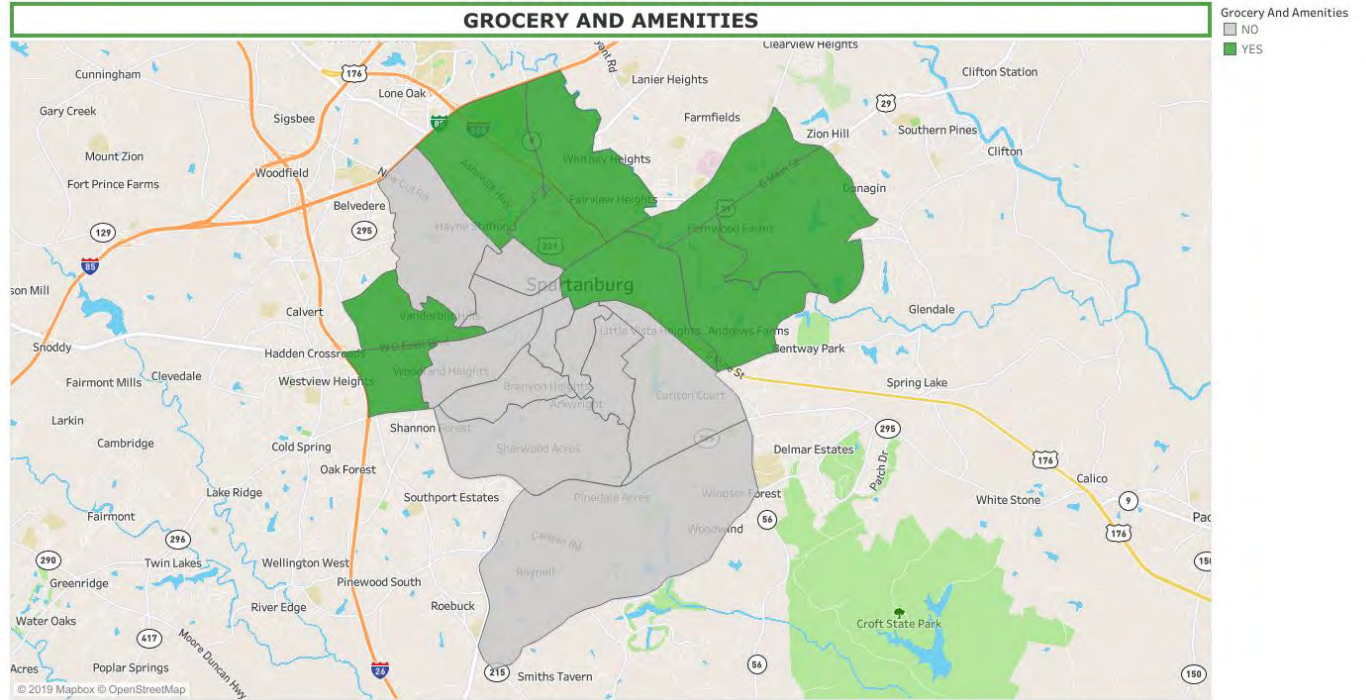
Food Desert Map



Food Desert ⁶	# of Tracts
Yes	8
No	12
Total	20

⁶ There are two clusters of food deserts, one being concentrated in the northern to northwest and another from stretching from southwest to southeast.

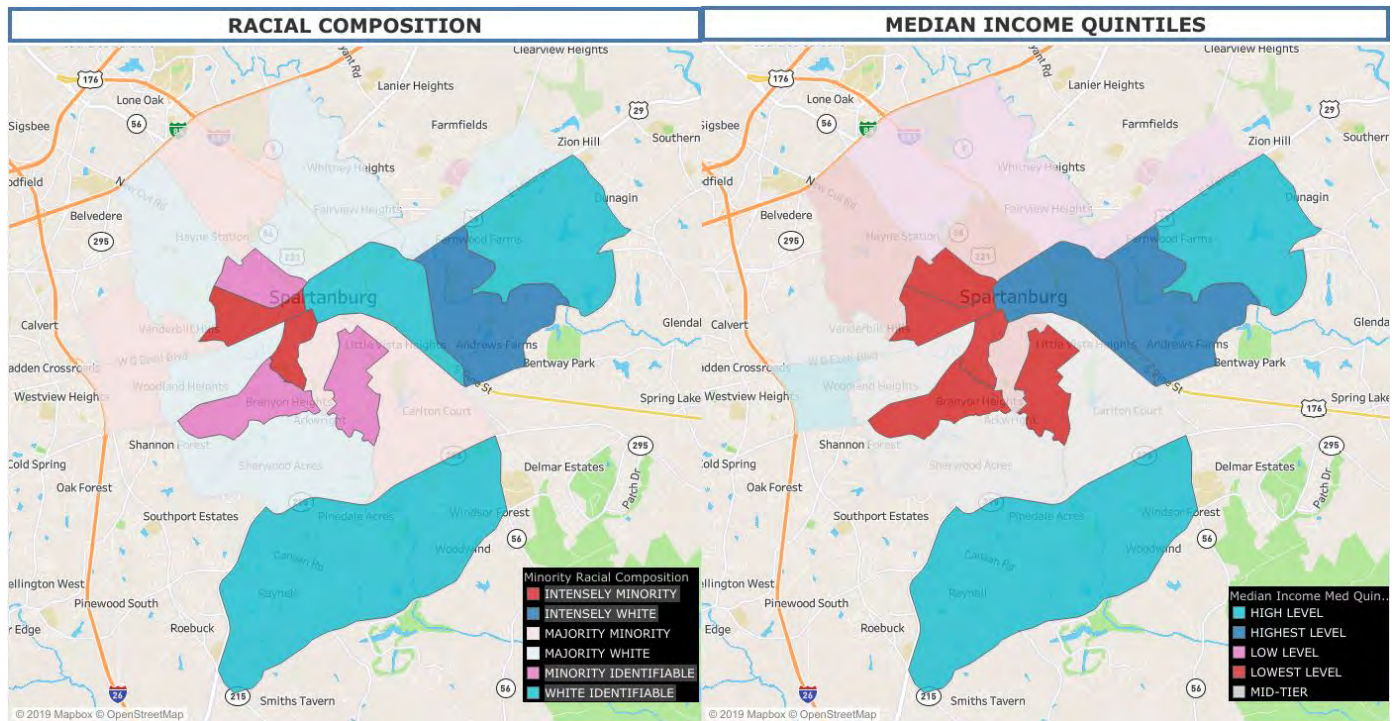
Grocery and Amenity Map



Grocery and Amenities ⁷		# of Tracts
Yes		9
No		11
Total		20

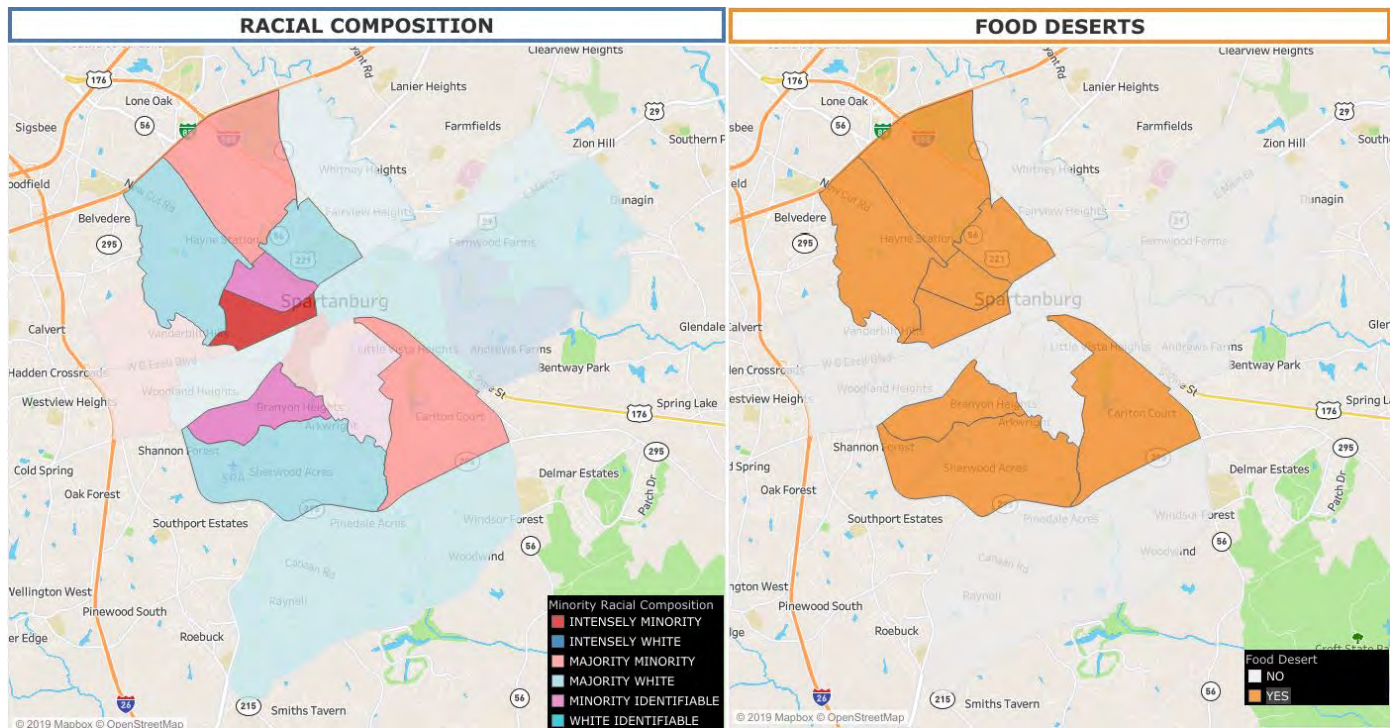
⁷ Communities with grocery stores and amenities are clustered in the western, northern, and northeast portions of the city.

Race x Median Income Quintiles⁸



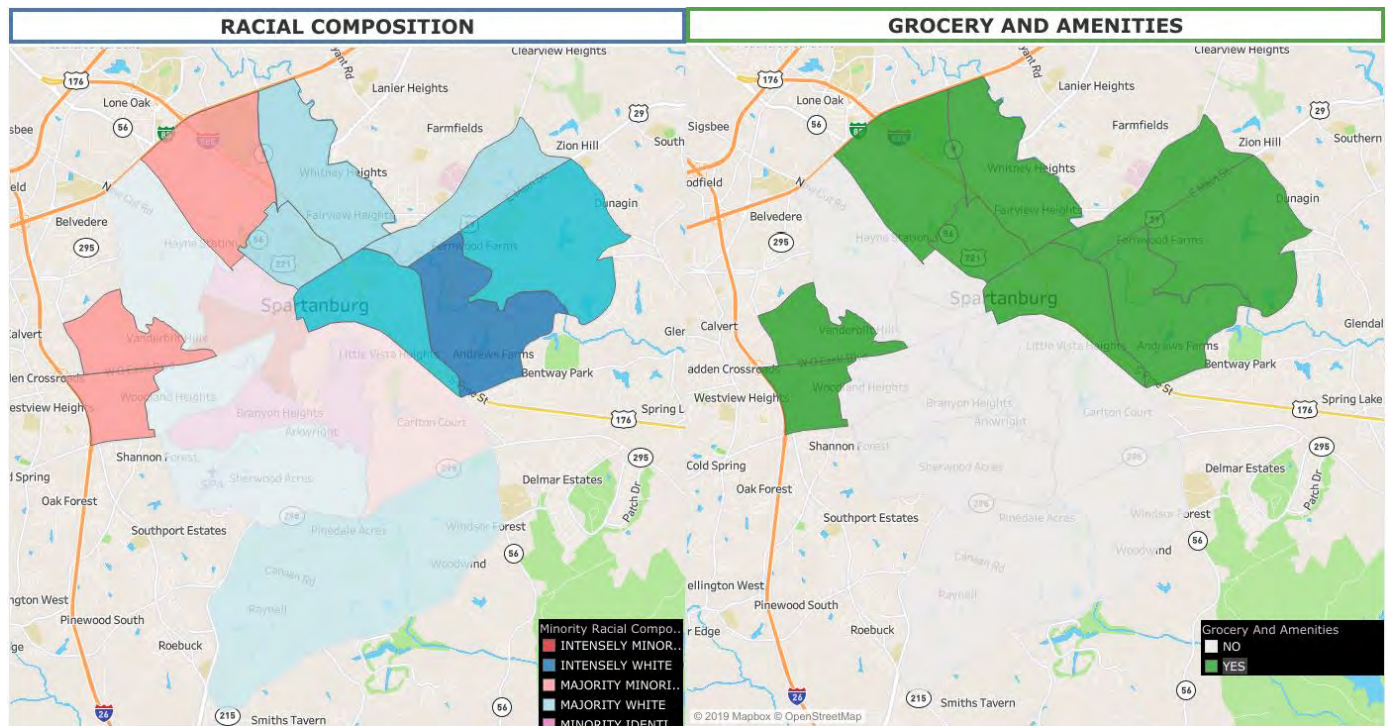
⁸ Racially identifiable communities were filtered to observe their comparative income profiles. All five minority identifiable communities were in the lowest income quintile compared to the Southeast. Conversely, all four white racially identifiable communities were in the high and highest quintiles, respectively. These results indicate a significant income gap between white and non-white communities in Spartanburg. Identifiable white communities in Spartanburg are much more likely to be among the most affluent in the region, whereas identifiable minority communities can be compared to the poorest areas in the Southeast.

Race x Food Desert⁹



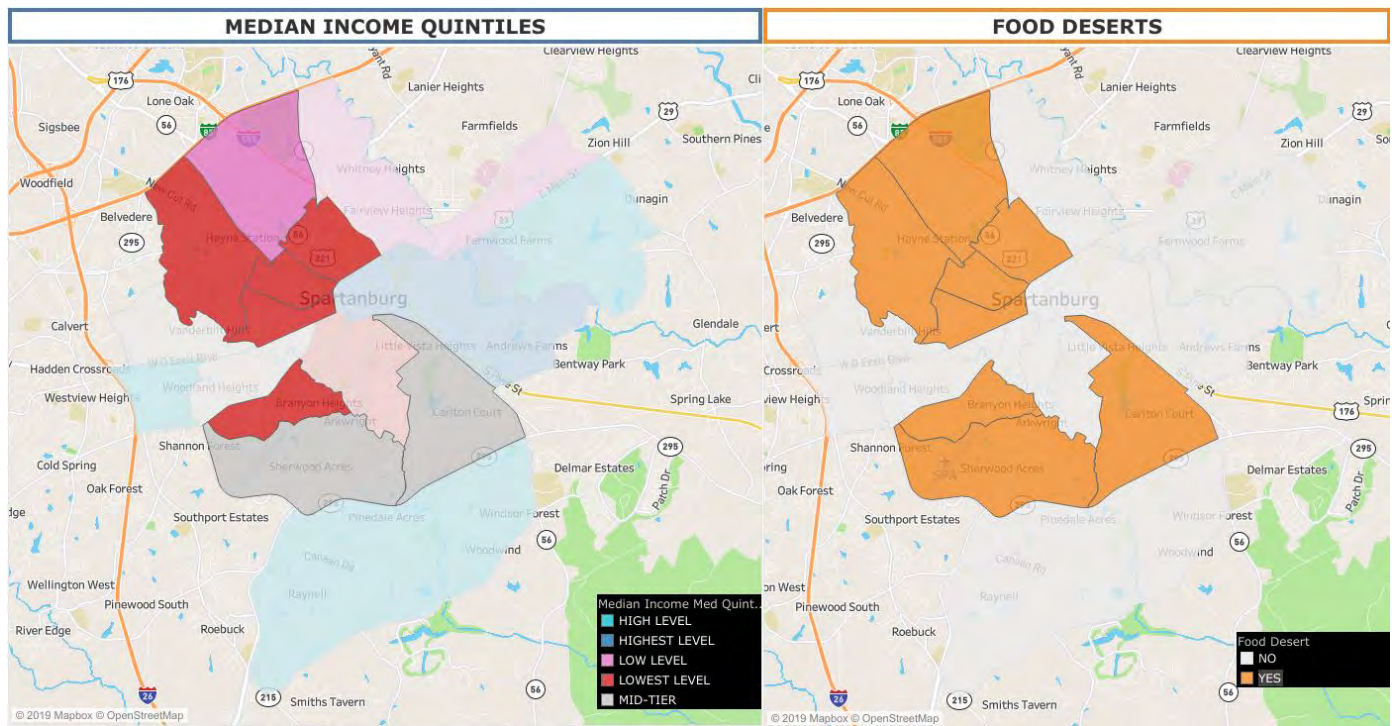
⁹ Five of the eight food deserts are in either majority white or majority minority communities. This means that communities where there is a mix of white and minority residents are more likely to be food deserts. At the same time, three of the food deserts are in either minority identifiable or intensely minority communities, but none of the food deserts are in white identifiable-to-intensely white communities. Overall, it can be asserted that communities with considerable to heavy minority populations are more likely to be food deserts.

Race x Amenities¹⁰



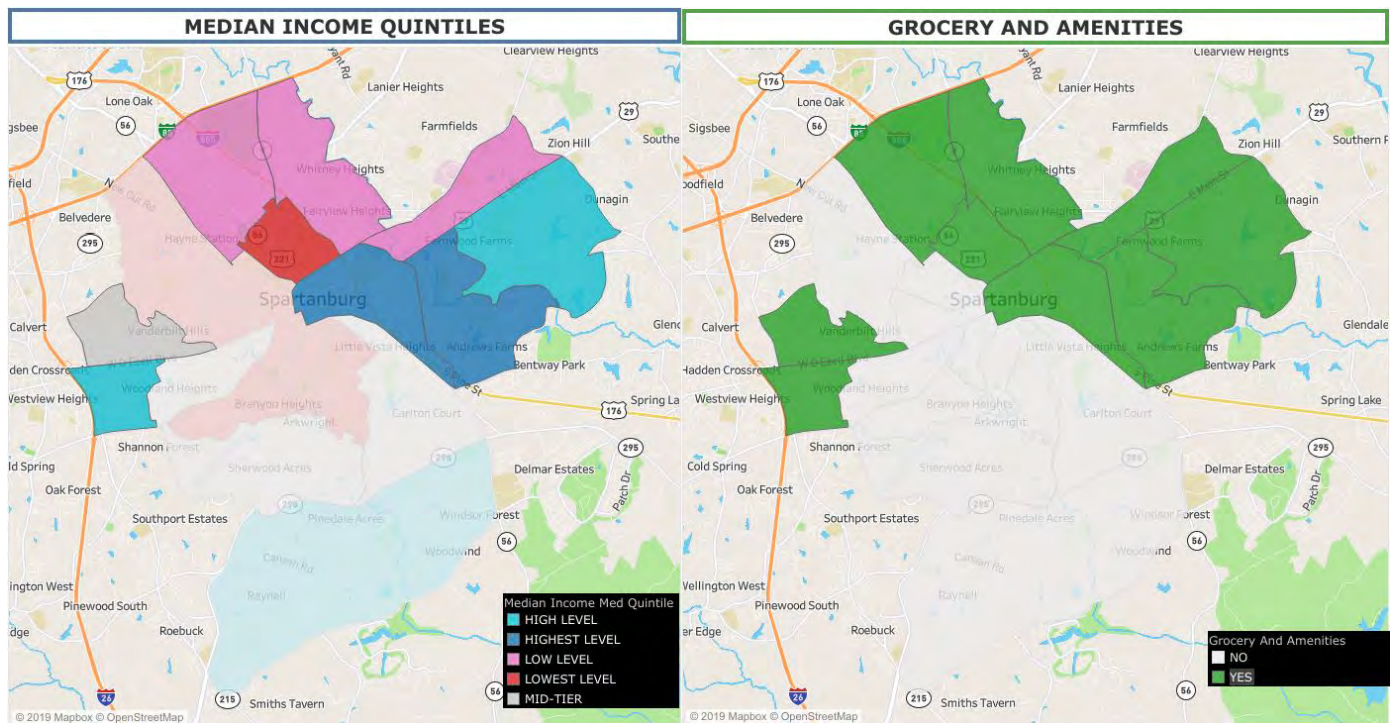
¹⁰ When filtered, it can be observed that none of the census tracts with minority identifiable racial compositions have grocery stores or other amenities. As mentioned earlier in the amenities map, there are clusters in the western, northern, and northeast portions of the city. When coupled with the racial composition map, it can be observed that a large cluster in the northeast and east contain white identifiable communities. Moreover, amenities are also clustered in three majority white communities bordering the white identifiable cluster. The three majority minority communities with amenities are located near the outer edges of the city limits.

Median Income Quintiles x Food Deserts¹¹



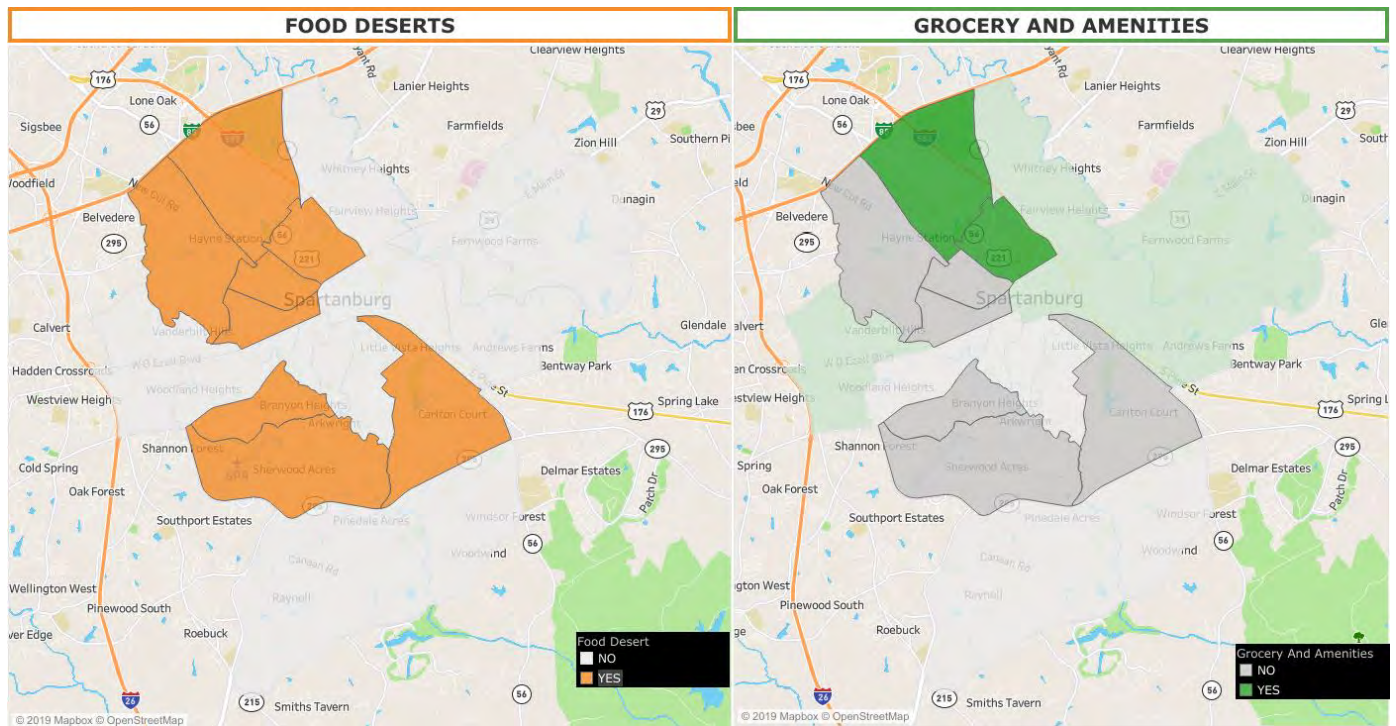
¹¹ Consistent with the food deserts being defined as low-income, low-access tracts, five of eight food deserts are either in the lowest median income quintile. The two southernmost food deserts are both in the mid-tier median income quintile.

Median Income Quintiles x Amenities¹²



¹² The relationship between amenities and income is weaker than the relationship between amenities and race. Whereas six of nine communities with amenities were majority white to intensely white, only five of the nine tracts with amenities range from the mid-tier to highest income quintiles. Particularly, the northern to northwestern cluster of tracts with amenities contains the four communities that are either in the low or lowest median income quintiles. One community, the census tract containing Wofford College, is in the lowest median income quintile yet it has either a grocery store or Starbucks location. Despite having low income profiles, census tracts containing colleges and their surrounding areas are much more likely to have resources such as grocery stores or amenities like Starbucks than a low-income, residential community. This is supported by two visualizations created by Carter. One, *County Socioeconomic Typologies*, classified low income, high-education counties as “college counties.” Another visualization, *Supermarkets, Coffee Shops, and Socioeconomic Status*, found that the communities in Columbia, South Carolina proximal to the University of South Carolina contained either Publix, Whole Foods, or Starbucks locations despite have some of the lowest median incomes in the county. Both visualizations showed that socioeconomic status could not be gauged by median income alone. When one assesses resources, education, and income, a clearer picture of socioeconomic status can be gleaned.

Food Deserts x Amenities¹³



¹³ Two communities or census tracts were both classified as food deserts and contained amenities. This finding could be attributed to the aforementioned footnotes referencing median income x amenities map. One census tract contains Wofford College and the tract immediately north of it is also a food desert with amenities. This supports the assertion that communities near colleges have higher socioeconomic statuses despite comparatively low median incomes.

References

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Appendix A

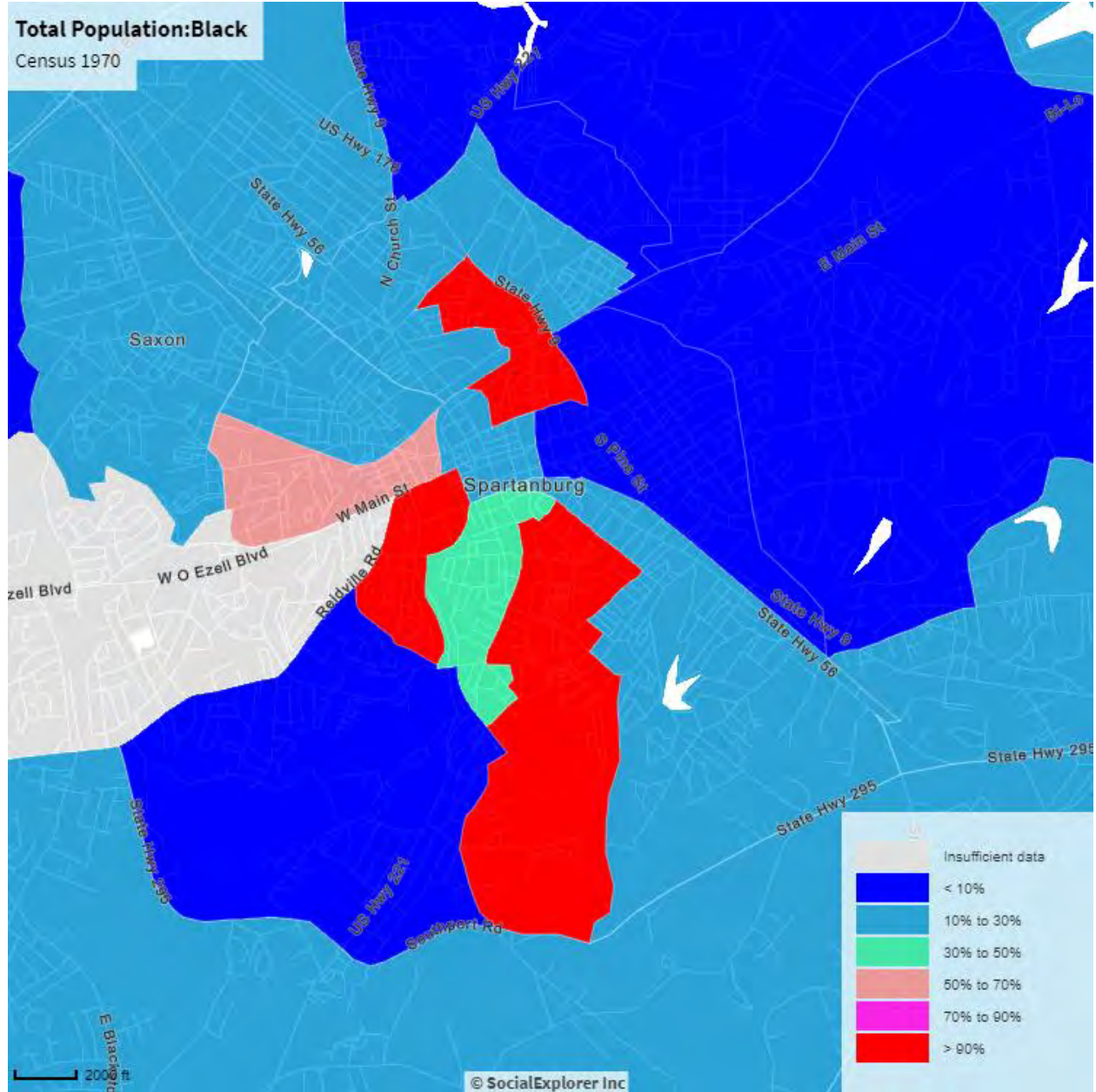


Figure A-1. Spartanburg Black Racial Composition 1970¹⁴. Source: Social Explorer®.

¹⁴ Using an African American racial composition map from the 1970 Census, racially segregated communities can be identified by red and blue coloring. In the map, it can be observed that southern clusters of minority identifiable communities and eastern/northeastern clusters of white identifiable communities' match racially segregated communities from 1970. Consistent with the design of the racial composition variable, it was able to connect historic racial segregation to present-day racial demographics in Spartanburg's communities. However, some changes in racial composition can be noted. One intensely African American census tract in the northern part of the city proximal to Wofford College is now contained with a census tract that includes the central business district. One

Appendix B



Figure A-2. Spartanburg Racial Dot Map with Minority Identifiable Communities Circled¹⁵.
Source: Cooper Center Demographics Research Group at the University of Virginia.

western census tract found to be intensely minority was majority African American in 1970. The census tract immediately north of it, now minority identifiable, was likely white identifiable in 1970.

¹⁵ Green dots indicate African American residents. Though the area to the south of Wofford College identified as intensely segregated African American in 1970 is no longer in a minority identifiable census tract, African American residents can still be identified in the smallest circle in the figure that is consistent with the location. Other larger circles point to the areas approximate to minority identifiable and intensely minority communities from the racial composition maps. The racial dot map shows specifically that minority identifiable and intensely minority communities in Spartanburg are predominantly inhabited by African Americans.