

Where Should You Move?

URP4273

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Introduction:

Moving to a new place can be one of the most stressful things that someone must decide. In this project the group was asked to think about two states that you would consider moving to, as well as the most important factors (measures and Indicators) we would want in a place that you were considering moving to. As a group we decided to consider the state of Georgia and North Carolina. The reason for choosing Georgia is because one of our group members has received a job offer by a company in Georgia after they graduate, and the reason for choosing North Carolina was one of the members of the group was born but moved away at a very young age. Our goal for this project was to find an area that would fit an established young family with parents the age of 30-40 raising children in middle school. The measures that we found most important for a family were safety, community, health, education, and economy. Once these were decided we could get more specific with the indicators needed. The nine indicators chosen were: index crime rate less than 2500, population of at least 30,000 people per county, crash index rate less than 2000, disposable income, poverty less than 15 %, age range, college educated, patient experience at hospitals to be great than or equal to the national average, and effectiveness of care at hospitals to be greater than or equal to the national average. Then after analyzing the data that was found for the locations we narrowed it down to three counties in each state that would suited to live in by the standards that were stated above. From there we were able to narrow down our choices to three zip codes combined in both states, finally choosing a destination to live.

Analysis:

We gave the highest priority to our measures based on their importance to a young family with children, and how the information was found (by county or zip code). The information found by county was prioritized first because counties have larger areas than zip codes. This allowed us to look at the geography of the counties and the major cities and attractions associated within the area. Then, after narrowing our data down to a few counties within Georgia and North Carolina, we focused on the data organized by zip code. This discovered which locations within each county are most suitable to live by our standards.

Safety was the primary measure we chose when looking for the best place to live. The Index Crime Rate (ICR) and vehicular crash rate were our two indicators to help determine the safest counties in Georgia and North Carolina. Index crimes are defined as the eight crimes (aggravated assault, arson, burglary, homicide, larceny, motor vehicle theft, rape, and robbery) the FBI uses to create their crime index. The rate is determined by the number of crimes per population of 100000. We looked for counties that had an ICR of less than 2500, or 2.5%. For car accidents, we generated a crash index rate like the ICR by taking the number of accidents per population of 100000. As a young family, there are many hours spent on the road due to work and taking care of the children, so it is important that the roads are safe and secure, so we set an accident rate of less than 2000, or 2%.

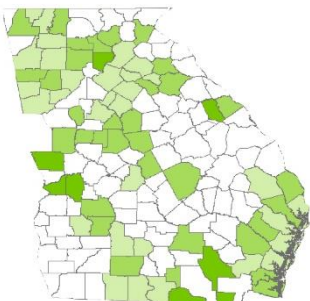


Figure 1: Georgia Index Crime Rate

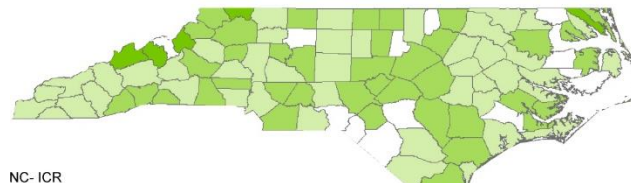


Figure 2: North Carolina Index Crime Rate

Figures 1 and 2 ICR Ranges:

0-1250.....Darkest Green

1251-2500

2501-4500

4501+Lightest Green

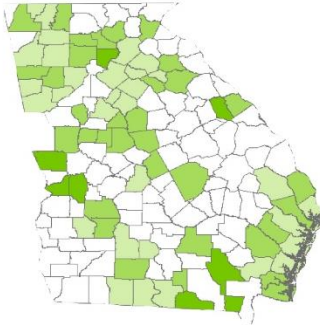


Figure 3: Georgia Crash Index Rate

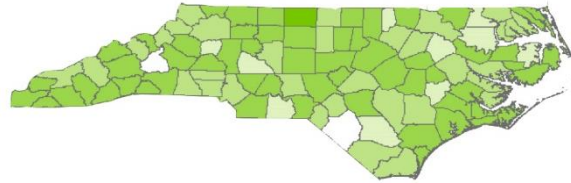


Figure 4: North Carolina Crash Index Rate

Figures 3 and 4 CIR Ranges:

0-1000.....Darkest Green

1001-2000

2001-3500

3501+Lightest Green

Our next measure focused on the community of each county. First, we considered counties with populations larger than 30,000 people. This was because areas with larger populations tend to have more job opportunities and closer proximity to necessary amenities, such as grocery stores, hospitals, schools, and entertainment. Then, we looked at the diversity index of each county. We wanted to find a place with a diverse population to our children become familiar with multiple cultures and ways of life.



Figure 5: Georgia Diversity Index

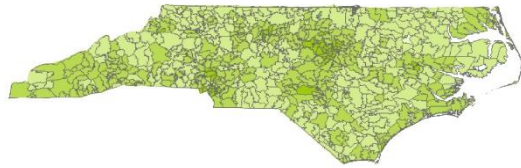


Figure 6: North Carolina Diversity Index

Figures 5 and 6 Diversity Index Ranges:

- 51-100.....Darkest Green
- 40-50
- 21-39
- 11-20
- 0-10Lightest Green

Health was the next measure we found as most important. Due to our previous indicator concerned with the population of the county, the more people in an area means there are health care services and hospitals within the proximity. For this, our indicators focused on the overall effectiveness and patient experience of the primary hospital in each county. Then, we compared their ratings to the national average, identifying which locations offered the best health care service. We looked for areas that offered the same or above average ratings in the effectiveness and approval of the hospitals.

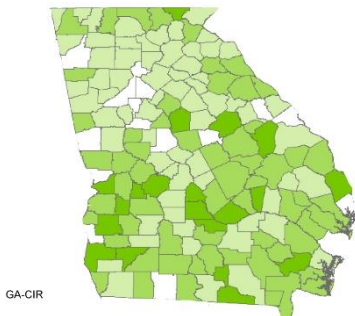


Figure 7: Georgia Patient Experience



Figure 8: North Carolina Patient Experience

Figures 7 and 8 Patient Experience Ranges:

Above the National Average.....Darkest Green

Same as National Average

Below National Average.....Lightest Green

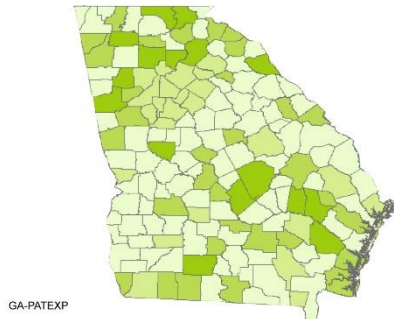


Figure 9: Georgia Hospital Effectiveness of Care

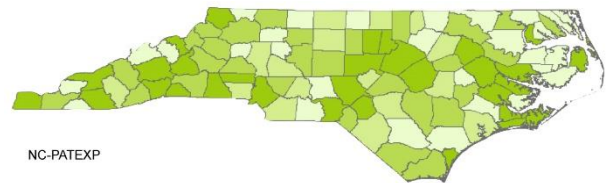


Figure 10: North Carolina Effectiveness of Care

Figures 9 and 10 Effectiveness of Care Ranges:

Above the National Average.....Darkest Green

Same As National Average

Below National Average.....Lightest Green

The economy of the area was a less important measure we determined to help find the best place to live. We focused on the average disposable income in the area, along with the associated poverty level. Disposable income is defined as the amount of income available to be spent or saved after taxes and other charges are paid. The poverty level is based off the poverty line, which is the minimum level of income needed to maintain a secure life. As a young family, we are looking for a disposable income of more than \$45,000 and poverty rate less than 15 %. We started out wanted the place for us to live to have at least a disposable income of \$25,000; however, this did not narrow down our results the way that we were hoping. This information

was important in our final decision-making process because this information was provided by zip code; further letting us narrow down our results.



Figure 11: Georgia Disposable Income

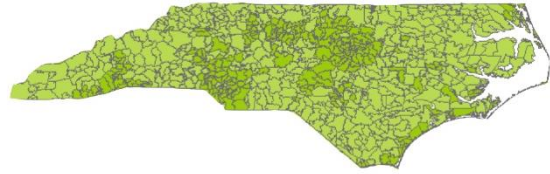


Figure 12: North Carolina Disposable Income

Figures 10 and 11 Disposable Income Ranges:

- 45k+.....Darkest Green
- 20k-44k
- 10-19k
- 0-9k.....Lightest Green

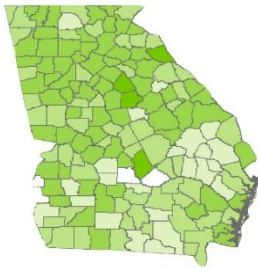


Figure 13: Georgia Poverty Rate

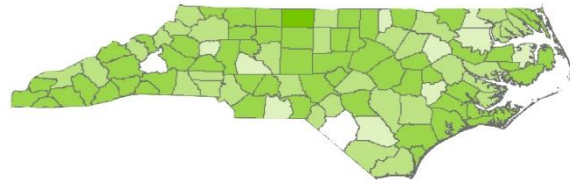


Figure 14: North Carolina Poverty Rate

Figures 13 and 14 Poverty Rate:

- 0-7.5.....Darkest Green
- 7.6-15
- 15.1-22.5
- 22.6-30
- 30.1+Lightest Green

Our last measure was concerned with the education of the people. We looked at the percentage of people who received a college education, making sure at least 50% of the population received a college diploma. Fortunately, this information was organized by zip code, and was the important deciding indicator as to which area was best to live.

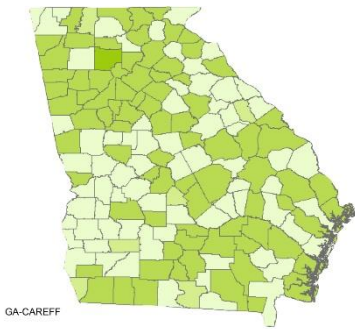


Figure 15: Georgia Percent College Educated

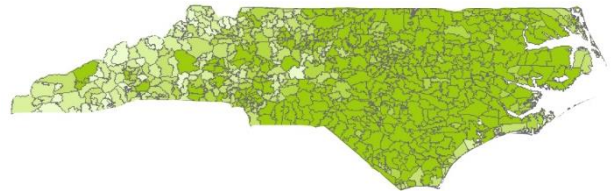


Figure 16: North Carolina Percent College Educated

Figures 15 and 16 Percent College Educated Ranges:

- 71-100.....Darkest Green
- 41-70
- 21-40
- 0-20Lightest Green

Conclusion:

Ultimately, our data and indicators helped narrow the selection to two counties: Camden County, Georgia, and Johnston County, North Carolina. The results gave us two zip codes within these counties, 31558 in Georgia and 27520 in North Carolina that fulfilled the requirements of our indicators. Below is the comparison of the two place:

Table 1: Comparison of Selected Zip Codes

<u>Measure</u>	<u>Camden County, Georgia</u> 31558	<u>Johnston County, North Carolina</u> 27520
Population	51,460 people	174,801 people
Diversity Index	52.4 per 100 people	51.4 per 100 people
Index Crime Rate	1611	2249.9
Crash Index Rate	1719.78	1977.11
Poverty Rate	11.2 %	12.7 %
Average Disposable Income	\$52,343	\$56,459
Effectiveness of Care	Same as National Average	Above the National Average
Patient Approval	Same as National Average	Above the National Average
% College Educated	57.1 %	55.1 %

We decided that the zip code 31558 located in Camden County, Georgia, was the best location for a young established family that had to pick up and move. This final decision was based on its proximity to a major city, Jacksonville, providing a large population and accessibility to work, schools, and entertainment. After the analysis of the two being so close we made our final decision based on the fact that 31558 is a short distance from the Atlantic Ocean beaches.