

## **Another Restaurant in Greenville, SC ?**

### **Introduction**

Deciding the optimum geographical location to open a business depends on many factors, including not only the cost of the real estate involved, but also less easily quantifiable factors such as neighborhood type and demographics, transportation availability, the presence (or absence) of similar establishments (and the associated ratings of those businesses), and even physical security needs. A sole proprietor or silent investor preparing a business plan for a new restaurant ignores these softer factors at his or her peril.

The purpose of this project will be to combine multiple freely available real estate related API databases to recommend several possible alternatives for a new restaurant in the Greater Greenville, SC area.

### **Target Audience**

Stakeholders would include interested investors- both as the main proprietors or less active backers simply performing due diligence. These could be silent partners, bank loan officers, or small business administration officials. The analysis is not meant to be financial in nature, but rather as an evaluation as to the more subjective “goodness of fit” for a restaurant in various geographic areas.

### **Background and Business Problem**

The US census Bureau has estimated South Carolina the sixth most rapidly growing state in 2020 (1). Within this state, Greenville and the surrounding counties (The Greenville-Anderson-Mauldin Metropolitan Statistical Area) (2) is the fastest growing, with a population growth rate in Greenville county of greater than 16% from 2019 to 2020 alone (3). Having risen from the ashes of the textile industry collapse (4), the region boasts many large and light industries, including the largest BMW automotive plant in the world (5), the Michelin North American headquarters, the largest gas turbine plant in the world (7), an inland port that helps the state handle \$75B of goods annually (8), and a large branch of a fortune 500 engineering and construction services firm (9), a large University (10), and a 300,000 square foot corporate banking campus (11). A massive amount of light and support industries have grown up to support this economic and population growth. New neighborhoods are built from the ground up annually, along with the retail businesses required to support them.

Opening a restaurant in this geographic area might seem like a slam dunk- 16% more people is roughly 100,000 people based on current county population (there are several counties growing at or near this rate). These people all need to live somewhere, and they all need to eat. Most of them drive to work and home. The labor market is relatively tight, and the weather even allows out of doors dining more months than not during the year. However it is always a good idea to research location when opening any business. It would make little sense to open a five star restaurant in a lower middle class housing development surrounded by “meat and three” diners and fast food establishments (unless perhaps there was some other more appropriate neighborhood nearby. Having lived in this location for several years, the author has no doubt that many great business ideas have failed simply due to the lack of due diligence in location selection. Others have clearly thrived as new clusters have literally sprung up in once deserted local areas.

### **Data**

This project will combine the foursquare data along with other freely available research data and APIs order to examine, compare, and cluster real estate, transportation, and crime statistics for the Greenville county and surrounding areas. These data sources and the data available from them are summarized in table 1.

Foursquare allows identification of business type, location, and ratings. Zillow offers up to date residential real estate information including home prices, housing inventory by location. Walk-score allows the user to identify the ability of a resident to walk to nearby amenities. There is also a transit score (for public transit), and a bike score for bike accessibility. Greenville contains over 75 miles of bike and walking trails. Many popular restaurants are already located along these routes. Crime score provides a simple assessment of the crime in a given area.

Businesses will first be clustered geographically and by type using foursquare (similar to the previous assignment), and then those geographic locations will be further examined using the additional databases. Real estate, transportation, and crime will be clustered along with the foursquare data. This will allow a multi-dimensional assessment of what locations are best to open a new business.

<b>Table 1: Data Sources To Be Used</b>			
<u>Data Category</u>	<u>Access Type</u>	<u>Used to Study</u>	<u>Website</u>
Location	html	postal codes	<a href="https://www.zip-codes.com/state/sc.asp">https://www.zip-codes.com/state/sc.asp</a>
Business	API	Business type, location, rating	<a href="https://developer.foursquare.com/">https://developer.foursquare.com/</a>
Real Estate	API	Housing Type and Location	<a href="https://www.zillow.com/howto/api/APIOverview.htm">https://www.zillow.com/howto/api/APIOverview.htm</a>
Real Estate	CSV	Home values, rentals, inventories	<a href="https://www.zillow.com/research/data/">https://www.zillow.com/research/data/</a>
Transportation	API	walkability, public transit, bike accessibility	<a href="https://www.walkscore.com/professional/pricing.php">https://www.walkscore.com/professional/pricing.php</a>
Crime	API	crime and other statistics	<a href="http://www.yourmapper.com/use-our-api.php">http://www.yourmapper.com/use-our-api.php</a>

**Data (Extract, Clean, Transform, and Load)**

**Data(Exploration and Analysis)**

**Data(Summary and Conclusions)**

**Discussion**

**Conclusions and Recommendations**

#### References

1. <https://www.census.gov/programs-surveys/popest/technical-documentation/research/evaluation-estimates.html>
2. [https://www.bls.gov/oes/current/oes\\_24860.htm](https://www.bls.gov/oes/current/oes_24860.htm)
3. <https://www.census.gov/data/tables/time-series/demo/popest/2010s-counties-total.html>
4. [https://independenttribune.com/news/decline-of-an-industry-what-happened-to-american-textiles/article\\_65325fc0-b20e-552c-a1bf-80b52e94ba06.html](https://independenttribune.com/news/decline-of-an-industry-what-happened-to-american-textiles/article_65325fc0-b20e-552c-a1bf-80b52e94ba06.html)
5. <https://www.bmwgroup-werke.com/spartanburg/en.html/>
6. <https://michelinmedia.com/about/>
7. <https://www.ge.com/news/reports/turbines-born-inside-look-ge-big-iron-maternity-ward>
8. <http://scspa.com/about/statistics/cargo-value/>
9. <https://www.fluor.com/about-fluor/locations>
10. <https://www.clemson.edu>