Grocery Store Gap Analysis for the City of Greenville, SC

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Abstract

Commercial real estate companies use many different research methods to determine what and where to develop. While working with the Furman Company for the past two summer, I was shown many times just how valuable gap analyses can be at determining the precise building locations.

This project looked at the current distribution of grocery stores across the city of Greenville along with various specific demographics to determine where other potential grocery stores may consider locating in the near future. My project determined that there are two potential sites; one on Easley Bridge rd and one on Wade Hampton blvd.

While I mapped out every sized grocer across Greenville county, my recommendations only came in the form or supermarkets since small grocers have potential in very small segments.

Introduction and Background

Much of my research was aided by Brian Reed with the Furman Company. He was able to provide site specific opportunity analysis for the locations I provided. Brian is the lead researcher for a major commercial real estate company here in Greenville, SC. I also used www.batchgeocode.com for all of my geocoding needs. This is a website designed to give you the latitude and longitude of any street address. Finally I used www.yellowpages.com to determine the address of all the grocery stores across Greenville county.

The final goal of my project was to determine which areas in Greenville might be under represented with respect to easy access to grocery stores. My ultimate goal is to return to work with the Furman Company this summer with my findings and propose these areas be considered for development of future grocery stores.

Methodology

The commercial real estate market is an ever changing ordeal. Since much of my project requires timely data, my suggestions are based on data taken on April 15th, 2009.

The first step I took to perform my gap analysis was to compile all of my data. I first had to use the yellow pages to acquire all of the address for the hundreds of grocery stores across Greenville county. Next, I took these addresses, screening out those not in the six major cities, and ran them through the geocoding process online to get their approximate latitude and longitude. I only choose to use Greenville, Mauldin, Greer, Simpsonville, Traveler's Rest, and Fountain Inn because they contain most of Greenville counties developments.

With this data, I typed it all up into an excel spread sheet, and using ArcMap, I overlaid it on top of my Greenville county layer. From here I overlaid the other states, counties, major roads, and population densities taken from Furman's Data Resources.

For the next step I received help from Brian Reed (Furman & Co) to determine purchasing power (average income levels) and opportunity analysis for supermarkets since this information in not available to the public for such a small area. I then overlaid this data on top of my other work and derived two acceptable sites.

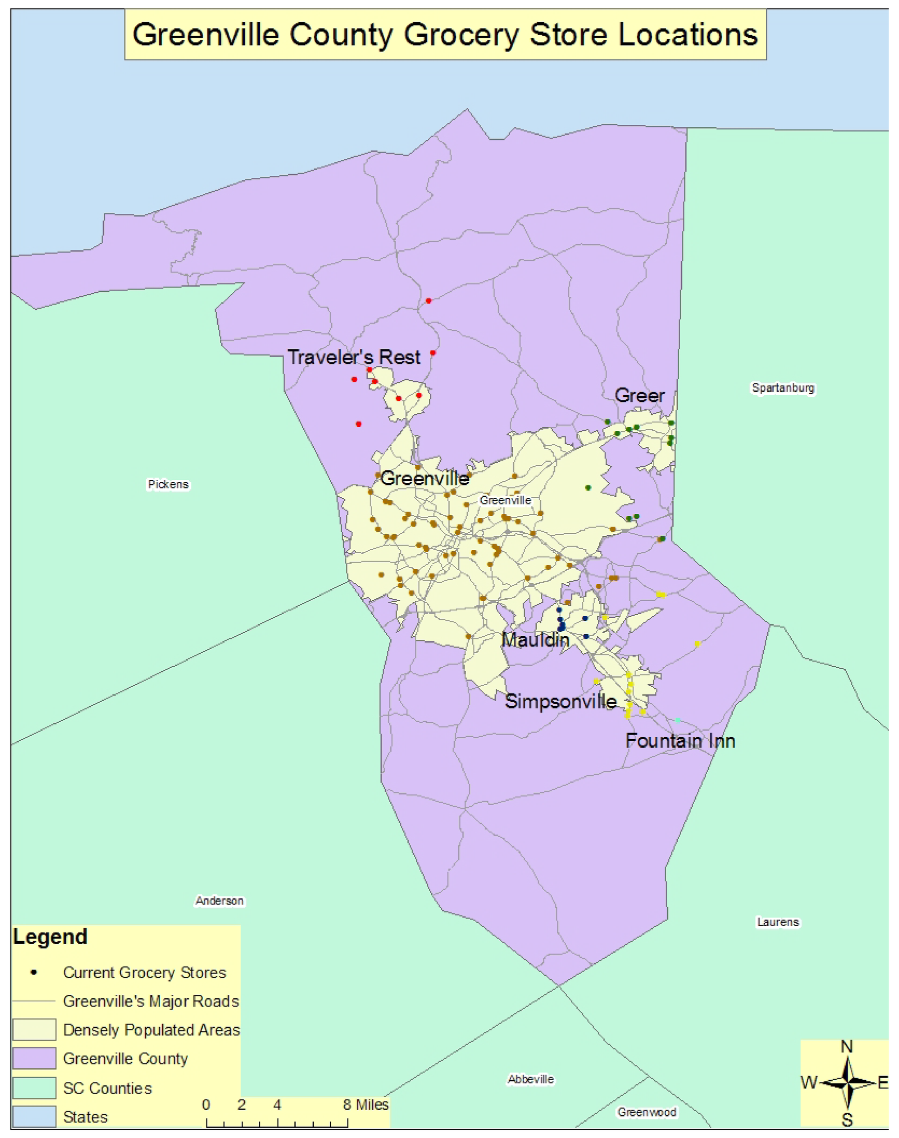

Figure 1: This map depicts all of the grocery store locations throughout Greenville County divided up by the city in which they reside.

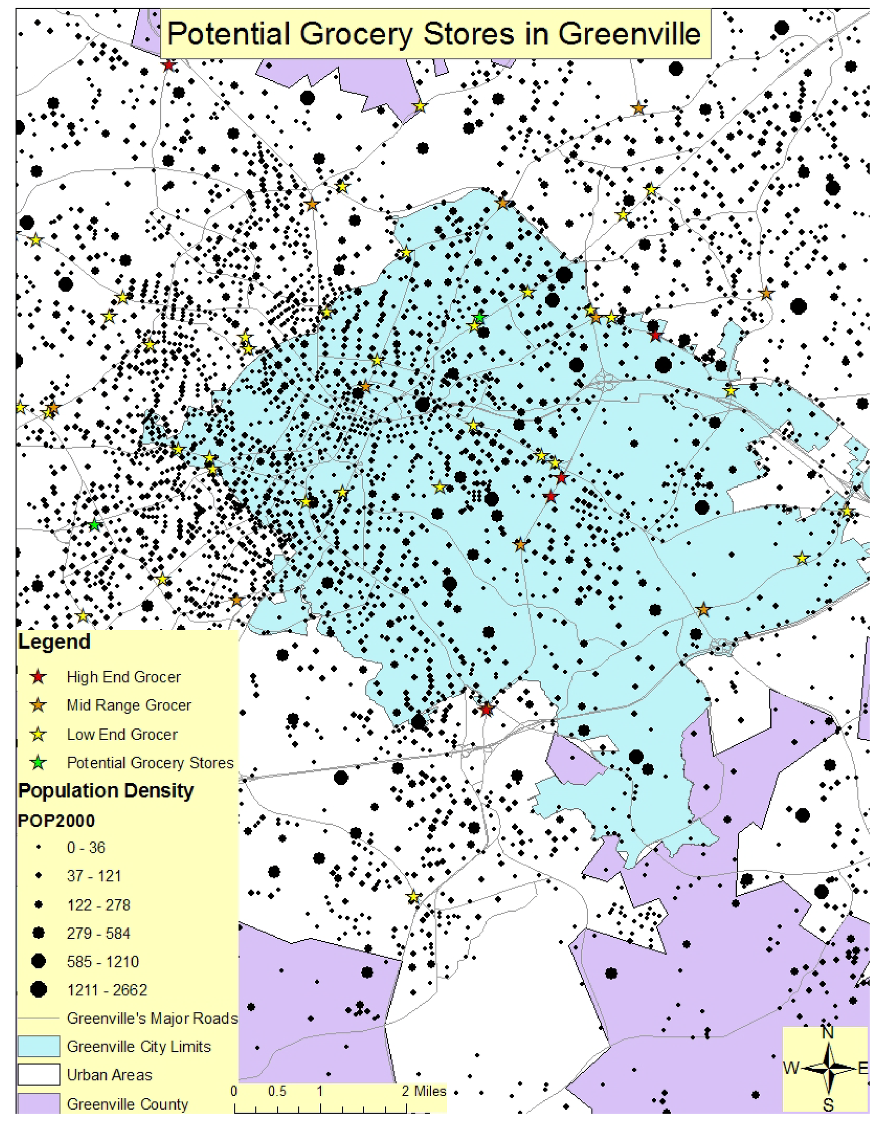

Figure 2: This map overlays the Greenville city limits (in blue) with the population density of each census tract, actual grocery store locations (red), and potential grocery store locations (green).

Pop-Facts: Demographic Quick Facts 2008 Report

114 Easley Bridge Rd

Radius 1: 34.84335/-82.42194, aggregate
Radius 2: 34.84335/-82.42194, aggregate
Radius 3: 34.84335/-82.42194, aggregate

Description	0.00 - 1.00 miles Radius 1	%	0.00 - 3.00 miles Radius 2	%	0.00 - 5.00 miles Radius 3	%
2008 Est. Households by Household Income	3,303		26,945		56,557	
Income Less than $15,000	1,295	39.21	7,254	26.92	12,612	22.30
Income $15,000 - $24,999	630	19.07	4,400	16.33	8,894	15.73
Income $25,000 - $34,999	453	13.71	3,956	14.68	8,442	14.93
Income $35,000 - $49,999	489	14.80	3,968	14.73	9,346	16.52
Income $50,000 - $74,999	270	8.17	3,351	12.44	8,599	15.20
Income $75,000 - $99,999	95	2.88	1,500	5.57	3,587	6.34
Income $100,000 - $149,999	58	1.76	1,412	5.24	3,044	5.38
Income $150,000 - $249,999	12	0.36	719	2.67	1,368	2.42
Income $250,000 - $499,999	0	0.00	246	0.91	441	0.78
Income $500,000 and over	0	0.00	140	0.52	224	0.40
2008 Est. Average Household Income	$27,246		$45,998		$47,306	

Opportunity Gap by Retail Store Types

Area(s): Radius 1.0

Latitude: 34.867540
Longitude: -82.377850

628 Wade Hampton Blvd

Retail Stores	2008 Demand (Consumer Expenditures)	2008 Supply (Retail Sales)	Opportunity Gap/Surplus
Total Retail Sales & Eating, Drinking Places	163,726,801	82,556,176	81,170,624
Motor Vehicle & Parts Dealers-441	31,358,134	4,732,299	26,625,835
Automotive Dealers-4411	26,809,602	3,080,129	23,729,473
Other Motor Vehicle Dealers-4412	2,036,725	0	2,036,725
Automotive Parts/Accsrs, Tire Stores-4413	2,511,808	1,652,170	859,637
Furniture & Home Furnishings Stores-442	3,709,562	1,966,572	1,742,990
Furniture Stores-4421	2,018,227	675,400	1,342,826
Home Furnishing Stores-4422	1,691,335	1,291,172	400,164
Electronics & Appliance Stores-443	4,079,618	6,348,655	-2,269,037
Appliance, TVs, Electronics Stores-44311	2,985,492	3,653,450	-667,957
Household Appliances Stores-443111	594,876	2,738,000	-2,143,124
Radio, Television, Electronics Stores-443112	2,390,617	915,450	1,475,167
Computer & Software Stores-44312	946,679	1,351,872	-405,193
Camera & Photographic Equipment Stores-44313	147,446	1,343,333	-1,195,887
Building Material, Garden Equip Stores -444	15,899,978	9,471,191	6,428,787
Building Material & Supply Dealers-4441	14,584,331	8,605,743	5,978,587
Home Centers-44411	5,790,704	7,078,528	-1,287,824
Paint & Wallpaper Stores-44412	335,214	896,588	-561,375
Hardware Stores-44413	1,198,347	0	1,198,347
Other Building Materials Dealers-44419	7,260,067	630,627	6,629,439
Building Materials, Lumberyards-444191	2,469,946	215,050	2,254,897
Lawn, Garden Equipment, Supplies Stores-4442	1,315,647	865,447	450,200
Outdoor Power Equipment Stores-44421	204,529	409,406	-204,877
Nursery & Garden Centers-44422	1,111,118	456,041	655,077
Food & Beverage Stores-445	19,029,765	3,593,659	15,436,106
Grocery Stores-4451	17,046,412	3,345,549	13,700,863
Supermarkets, Grocery (Ex Conv) Stores-44511	16,152,690	2,929,031	13,223,660
Convenience Stores-44512	893,721	416,518	477,203
Specialty Food Stores-4452	514,660	1,444	513,216
Beer, Wine & Liquor Stores-4453	1,468,693	246,665	1,222,028

Figure 3: This figure shows both the average annual income for nearby families and the opportunity analysis for a potential Easley Bridge Rd grocery store.

Pop-Facts: Demographic Quick Facts 2008 Report

628 Wade Hampton Blvd

Radius 1: 34.86754/-82.37785, aggregate
Radius 2: 34.86754/-82.37785, aggregate
Radius 3: 34.86754/-82.37785, aggregate

Description	0.00 - 1.00 miles Radius 1	%	0.00 - 3.00 miles Radius 2	%	0.00 - 5.00 miles Radius 3	%
2008 Est. Households by Household Income	4,043		29,415		64,476	
Income Less than $15,000	624	15.43	6,785	23.07	12,376	19.19
Income $15,000 - $24,999	578	14.30	4,498	15.29	9,218	14.30
Income $25,000 - $34,999	553	13.68	4,581	15.57	9,445	14.65
Income $35,000 - $49,999	697	17.24	4,693	15.95	10,653	16.52
Income $50,000 - $74,999	746	18.45	4,291	14.59	10,318	16.00
Income $75,000 - $99,999	324	8.01	1,852	6.30	5,068	7.86
Income $100,000 - $149,999	347	8.58	1,702	5.79	4,478	6.95
Income $150,000 - $249,999	156	3.86	781	2.66	1,993	3.09
Income $250,000 - $499,999	15	0.37	185	0.63	612	0.95
Income $500,000 and over	3	0.07	48	0.16	315	0.49
2008 Est. Average Household Income	$53,490		$45,996		$52,922	

Opportunity Gap by Retail Store Types

Area(s): Radius 1.0

Latitude: 34.843350
Longitude: -82.421940

114 Easley Bridge Rd

Retail Stores	2008 Demand (Consumer Expenditures)	2008 Supply (Retail Sales)	Opportunity Gap/Surplus
Total Retail Sales & Eating, Drinking Places	86,753,868	60,709,812	26,044,056
Motor Vehicle & Parts Dealers-441	17,029,294	3,562,330	13,466,964
Automotive Dealers-4411	14,819,144	1,362,603	13,456,541
Other Motor Vehicle Dealers-4412	955,471	0	955,471
Automotive Parts/Accsrs, Tire Stores-4413	1,254,678	2,199,727	-945,049
Furniture & Home Furnishings Stores-442	1,640,300	3,512,126	-1,871,826
Furniture Stores-4421	968,721	2,102,860	-1,134,139
Home Furnishing Stores-4422	671,579	1,409,266	-737,687
Electronics & Appliance Stores-443	1,730,640	2,684,156	-953,516
Appliance, TVs, Electronics Stores-44311	1,355,199	980,851	374,348
Household Appliances Stores-443111	310,107	364,928	-54,821
Radio, Television, Electronics Stores-443112	1,045,092	615,923	429,169
Computer & Software Stores-44312	319,431	1,703,305	-1,383,874
Camera & Photographic Equipment Stores-44313	56,010	0	56,010
Building Material, Garden Equip Stores -444	7,401,611	3,242,161	4,159,450
Building Material & Supply Dealers-4441	6,809,445	3,229,207	3,580,238
Home Centers-44411	2,659,136	1,204,059	1,455,077
Paint & Wallpaper Stores-44412	139,474	0	139,474
Hardware Stores-44413	563,068	0	563,068
Other Building Materials Dealers-44419	3,447,767	2,025,148	1,422,620
Building Materials, Lumberyards-444191	1,100,602	690,599	410,003
Lawn, Garden Equipment, Supplies Stores-4442	592,165	12,953	579,212
Outdoor Power Equipment Stores-44421	97,138	0	97,138
Nursery & Garden Centers-44422	495,027	12,953	482,073
Food & Beverage Stores-445	13,247,390	5,370,978	7,876,412
Grocery Stores-4451	12,140,859	4,092,055	8,048,804
Supermarkets, Grocery (Ex Conv) Stores-44511	11,573,672	2,762,613	8,811,059
Convenience Stores-44512	567,187	1,329,442	-762,255
Specialty Food Stores-4452	391,842	56,117	335,725
Beer, Wine & Liquor Stores-4453	714,689	1,222,806	-508,116

Figure 4: This figure shows both the average annual income for nearby families and the opportunity analysis for a potential Wade Hampton Blvd grocery store.

References

The metadata for the states, counties, urban areas, city limits, population density, and major roadways - ESRI Data & Maps [CD-ROM], 2005. Redlands, CA: Environmental Systems Research Institute..

The grocery store locations - Yellow Pages Local Directory. 10 Apr. 2009. <http://www.yellowpages.com>

Geocoding - Map Multiple Locations by Address. 11 Apr. 2009. <http://www.batchgeocode.com>

The income levels for families and gap opportunity analysis was provided by Brian Reed at the Furman Company.

Coordinate Data: GCS_North_American_1983

Datum: D_North_American_1983

Results/Discussion

As of April 15th, 2009, there were over 112 grocery stores in the six major cities in Greenville county (Figure 1). The city of Greenville held over 70 by itself. My analysis focused on only the grocery stores located within the city limits of Greenville to slightly narrow down the search (Figure 2).

With the majority of the population residing in western Greenville it was only natural for the majority of the grocery stores to trend in that direction. By looking at Figure 2, I was able to roughly determine the areas that offered enough potential clients that were not already saturated with other supermarkets.

From here I was able to relay the coordinate data for the potential grocery store locations onto Brian Reed. He was able to provide with me with purchasing power statistics as well as an opportunity analysis for future supermarkets in Greenville (Figure 3 and 4).

This information ultimately lead to two locations. One on Easley Bridge rd and one on Wade Hampton blvd. Within a one mile radius of the coordinate data I provided him, he found that there is a 8 million dollar and 13.7 million dollar opportunity for a potential supermarket on Easley Bridge road and Wade Hampton blvd respectively. Figure 3 shows the average income level for Easley Bridge rd to be approximately $27,000. I would suggest a lower end or cost leader to consider this site for development. Figure 4 shows the average income to be around $53,000. With this information, I would suggest a slightly higher end supermarket, but not a top end grocer because of the poor economy.

There were 6 other locations that showed a positive opportunity for supermarkets, but none of the other sites were either zoned correctly and/or would have been able to purchase/combine parcels to meet the required space needed for a grocery store of that magnitude.

These opportunity numbers take into consideration current Permit Application trend for new housing in order to determine future residential growth. Residential housing leads to job creation, which is an important guideline for grocery store locations. If a grocery store knows which areas are going to increase in population, grocery stores would then try to find optimal locations based on major roadways that connect as much of these future developments as possible.

I chose these two locations because they seemed to meet all the criteria mentioned above.

Conclusions

- Greenville county does indeed have opportunities for future grocery store growth despite the 70 already in place.
- Of the locations derived from Figure 2, eight provided a positive opportunity for supermarkets.
- Of those eight, only two met all the criteria for zoning, utilities, and potential parcel sizes.
- This information, if taken to the right grocery store, could provide the beginnings of a development contract.
- This does not take into consideration grocery stores that are in the process of closing.

Acknowledgements

I would like to thank my father for his ideas and suggestions in helping me derive my project idea. I would also like to thank Brian Reed for all of his time and patients. The information he delivered was integral to the final gap analysis. Finally I would like to thank my professor, Suresh Muthukrishnan, for all of his insight into guiding my project ideas.