

Strategic Analysis of the TROSA Grocery Store in the Context of Durham's Food Deserts

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Table of Contents

1. Policy Question	pp. 3
2. Background	pp. 3
3. Methods	pp. 3
4. Literature Review	
4.1 Effects of Living in a Food Desert	pp. 4
4.1.1 Proximity of Fresh Food Retail	pp. 4
4.1.2 Cost of Groceries	pp. 5
4.1.3 Health Outcomes	pp. 5
4.2 Market Drivers of Food Deserts in the U.S.	pp. 6
4.3 Profitability of Urban Fresh Food Retail	pp. 6
4.4 Public Policy Response to Food Deserts	pp. 8
5. Analysis of Nutrition Access in Durham	pp. 10
Map 1: Food Deserts in Durham as Defined by the USDA	pp. 10
Table 1: Characteristics of USDA Food Desert Census Tracts in Durham ..	pp. 11
Map 2: Household Income, Bus Routes, and Grocery Stores in Durham ...	pp. 12
Chart 1: Social Determinants of Nutrition Related Health Outcomes	pp. 13
6. Summary of Findings	pp. 15
7. Public Policy Implications	pp. 16
8. Recommendations	pp. 16
9. Bibliography	pp. 18

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1. Policy Question

“What are the public policy and public health implications of fresh food access in Durham, and what public and private solutions would increase access to fresh food retail?”¹

2. Background

This research was commissioned by Triangle Residential Options for Substance Abusers, a non-profit based in Durham, North Carolina that operates several small businesses as part of their integrated approach to supporting rehabilitation through vocational training, counseling, and education in a therapeutic community setting.²

The policy question is drawn from the contextual analysis portion of the original research, which focuses on the public health benefits of urban fresh food retail, public policy programs to incentivize urban fresh food retail, and the role of fresh food retail within the broader context of nutrition related health outcomes. The recommendations of the original study were directed at TROSA; this modified version highlights findings and implications for public policy.

3. Methods

Contextual data was gathered through an in depth review of the literature concerning the causes of food deserts, the health effects of living in a food desert, and public policy response initiatives to increase fresh food retail within food deserts.

An impact map of the social determinants of nutrition choices in Durham was developed based on the literature review, as well as general understanding of the social determinants of health drawn from prior coursework, and interviews with local stakeholders. An overlay map of income levels by block group, public transportation routes, and grocery stores in Durham was created using income data from the American Community Survey 2006-2011, bus route data from Durham Area Transportation Authority, and grocery store data from the U.S. Census. A USDA food desert map was accessed via the USDA's website using their Interactive Food Desert Mapping tool. Data for the confidential strategic analysis portion was collected on-site at the TROSA Grocery Store.

¹ This policy question is a modification of the original policy question, “What is the strategic value of the TROSA Grocery Store to TROSA, in the context of nutrition related health outcomes in Northeast Central Durham?”

² The primary objective of the original research was to examine the strategic value of the TROSA Grocery Store, located in NE Central Durham. The profitability and strategic analysis conducted for TROSA contain confidential and proprietary data concerning costs, sales, and organizational priorities. As such, the original problem statement, strategic analysis and recommendations could not be included in this modified version of the thesis.

4. Literature Review

TROSA Grocery was founded in response to perceived lack of access to healthy foods in Northeast Central Durham. Northeast Central Durham includes several neighborhoods in Durham that can be classified as “food deserts”, defined as areas with limited access to fresh food retail. Research indicates that living in a food desert increases incidence of nutrition related diseases such as cardiovascular disease, diabetes, and hypertension.

The USDA has implemented the following definition of food deserts;

“...a low-income census tract where a substantial number or share of residents has low access to a supermarket or large grocery store:

- To qualify as a “low-income community,” a census tract must have either: 1) a poverty rate of 20 percent or higher, OR 2) a median family income at or below 80 percent of the area's median family income;
- To qualify as a “low-access community,” at least 500 people and/or at least 33 percent of the census tract's population must reside more than one mile from a supermarket or large grocery store (for rural census tracts, the distance is more than 10 miles).” (USDA 2011)

4.1 Effects of Living in a Food Desert

The following literature is not explicitly based on the USDA definition of a food desert. Use of the term may be understood by the common definition outlined in the previous section, which is;

- Lack of access to fresh foods, especially fruits and vegetables, within the neighborhood;
- Low income, implying high reliance on public transportation, which limits access to fresh food outside the neighborhood.

4.1.1 Proximity of Fresh Food Retail

The most direct effect of living in a food desert is reduced access to grocery stores selling fresh fruits and vegetables. Relatively early research found that low-income neighborhoods had nearly 30% fewer supermarkets than high-income neighborhoods (Weinberg, 1995), and that low-income residents may have difficulty paying the transportation costs associated with travel to supermarkets outside of their own neighborhoods (Rose and Richards, 2004). This lack of access is also exacerbated by unsafe night time walking conditions, lack of time for single, working parents to travel to the supermarket and prepare fresh food (Rose and Richards, 2004).

Independent of socioeconomic status, race has an additional effect on the likelihood of living in a food desert. Across the US, predominantly African American neighborhoods had 52% fewer supermarkets than White neighborhoods, even after controlling for income (Powell et al., 2007). In New Orleans, predominantly African American neighborhoods have fewer supermarkets, and the resulting lack of availability of fruits and vegetables was not offset by the presence of other store types (Bodor et al, 2010). Research in Detroit found that residents of predominantly African American neighborhoods had to travel 1.1 miles further to reach a grocery store selling fresh fruits and vegetables, that 28% of the residents of the most impoverished African American neighborhoods did not own a car in 2000, and that 76% of the most impoverished neighborhoods in Detroit were predominantly African American (Zenk et al, 2005).

However, a more recent study suggests that poorer neighborhoods tend to have more grocery stores, as well as more fast food restaurants and convenience stores, than do wealthier neighborhoods (Lee, 2012).

4.1.2 Cost of Groceries

Residence in a food desert results not only in decreased access to fresh fruits and vegetables, but in higher costs and lower quality of the fresh foods that are available. Multiple studies have indicated that residents of low-income neighborhoods pay more for their food (Chung and Myers, 1999), that food costs are higher and food quality lower in low income neighborhoods than in their high income counterparts (Henrickson et al, 2006) and that both fresh vegetables and salty snacks are more expensive in more urban, less residential areas (Stewart and Dong, 2011). In addition to the economic drivers outlined in the background section, high rates of crime have also been indicated as a driver of higher food costs, as product loss must be incorporated into the stores' profitability strategy (Henrickson et al, 2006).

4.1.3 Health Outcomes

While most of the research on food deserts focuses on cost and access issues, some researchers have been able to draw a correlative link between food desert residency and prevalence of obesity and related diseases. Research indicates that consumption of fruits and vegetables decreases while obesity incidence increases as distance to grocery stores increases for metropolitan residents (Michimi and Wimberly, 2010), and that residents of urban areas with a high concentration of small grocery stores, generally characterized by less availability of healthy foods, showed positive correlation with both obesity incidence and body mass index (Gibson, 2011).

However, a recently released study suggests that there is no consistent relationship between proximity of fresh food retail and incidence of obesity (Sturm, 2012).

4.2 Market Drivers of Food Deserts in the US

The grocery industry is characterized by consolidation, due to significant economies of scale (Datamonitor, 2010). Large retailers such as Wal-Mart are able to price aggressively because of the high volume of sales available to cover fixed costs, making it difficult for smaller grocery retailers to compete. Unit costs of grocery items also decrease significantly as ordering volume increases, which means that groceries with a smaller market not only have less volume to cover fixed costs, but also higher variable costs. (See pages 10-11 for an analysis of TROSA Grocery's unit costs relative to their competition). Customers also expect ample and easy parking and a large selection of products, both of which attract mobile urban customers out to large suburban grocery retailers, eroding the market for space constrained urban grocery retailers.

The result is increased consolidation of grocery retail into large, suburban "big box" grocery stores (Datamonitor 2010), leaving urban areas with small specialty stores pursuing a differentiation strategy, featuring more gourmet and organic products, and higher prices, as well as convenience stores which feature products that do not perish quickly, such as processed snacks, and subsidize food products through the sale of alcohol and tobacco.

4.3 Profitability of Urban Fresh Food Retail

In a Detroit based study, Coleman, Weatherspoon, Weatherspoon, and Oehmke found that there is latent demand for fresh fruits and vegetables in urban food deserts, given that residents travel to grocery stores outside of the neighborhood specifically to buy fruits and vegetables. They also found that income and affordability are a more important factor than geographic access in determining consumption patterns of fresh fruits and vegetables, but that if fruits and vegetables are introduced to the neighborhood at a price that is competitive with retailers outside the neighborhood, that consumption will rise. Finally, the authors determined that while residents of urban food deserts who do consume fresh fruits and vegetables regularly responded that they were satisfied with their consumption levels, that they are actually still consuming far less than the USDA recommended amounts, indicating that good nutrition information is lacking in these communities (Coleman et al, 2011).

Weatherspoon, Oehmke, Coleman, Satimanon, and Weatherspoon use the natural experiment of a fresh food retailer call "Peaches and Greens" opening in Detroit to test price and income elasticity for fresh fruits and vegetables in an urban food desert setting. They find that if fruits and vegetables are offered at a "normal" (competitive) price, that consumption will rise immediately. They also find that sales of fruits will outpace sales of vegetables, and that in both categories, sales of goods that can be consumed immediately will outpace sales of goods that require preparation (Weatherspoon et al, 2011).

Besharov, Bitler, and Haider provide an economic analysis of food deserts, outlining possible supply and demand causes for the phenomenon, as well as the types of market failure that may exist in a food desert. They argue that while economies of scale, defined as declining per unit costs with increasing volume, in the grocery industry would certainly prohibit a small retailer (such as TROSA Grocery) from being competitive, that it would not prohibit a large retailer (such as Food Lion) from opening a satellite store in a food desert. Economies of scope, defined as declining per unit operating costs with increased diversity of products, would also favor large retailers over small retailers. Finally, economies of agglomeration, defined as decreasing per unit operating costs with increasing concentration of retailers, would favor stores located in concentrated commercial areas over stores located on their own, with few other retailers nearby. Presumably, this is because concentration reduces time and transportation costs for consumers (Besharov et al, 2010).

Eisenhauer takes a historical approach, tracking the trends in urban fresh food retail through the 20th century. She states that beginning in the 1930's, large supermarkets began to overtake small supermarkets, as antitrust legislation was relaxed and the Great Depression and WWII forced many small supermarkets to shut down. In the 1950's, as white, middle class families moved out of the city and into the suburbs, supermarkets followed. The advent of computers and Universal Product Codes in the 1960's brought further advantage to large supermarkets by giving them the ability to track consumer responses to pricing and product offering, and to reduce inventory holding based on increased understanding of purchasing patterns. Price wars between the large grocery store chains in the 1970's put more small groceries out of business. Many large competitors were able to survive price wars through leveraged buy-outs, which increased consolidation and closing of less competitive locations, which the author infers were more likely to be located in urban areas.

Eisenhauer states that according to industry representatives, the "urban costs" of running a supermarket in the inner city prohibit opening new stores in urban areas. "Urban costs" are defined as increased security cost due to higher incidence of theft, increased transaction cost from having to purchase multiple lots to attain a profitable scale, and from the need to demolish existing structures prior to building, and higher land, utility, and labor costs. The US Conference of Mayors defines this as "supermarket redlining," and the author asserts that this practice is based on superimposed, racially motivated stereotypes.

Zweibach and Sonnenfeld offer the countervailing example of the chains Pathmar, Shaw's, and Community Pride, all of which have successfully maintained or opened grocery stores in inner city communities. Their recipe for success has been partnering with local non-profits and churches to ensure that business decisions represent the interests of the community, and tailoring their product offerings to the ethnic makeup of each community in which they are located. The willingness of these companies to integrate with the community has made the profitable enough to open additional inner city grocery stores (Zweibach, 1997; Sonnenfeld, 1999).

4.4. Public Policy Response to Food Deserts

In response to growing discourse around the health implications of lack of access to fresh food retail, a number of local governments and private foundations have implemented policies to encourage action within the private sector. The following is a sampling of some of the more prominent examples.

Louisville, KY

In early March, 2010, a USDA grant program awarded \$7.9 million to the city of Louisville for use in promoting increased access to nutritious foods for low income urban residents. The grant funds will be used to help small store owners wishing to expand provision of fresh fruits and vegetables, to help with marketing and promotion of healthy foods, to increase the availability of nutritious foods in schools, and to support other health and nutrition initiatives such as mobile markets and programs to encourage biking and walking (Klepal 2010).

One example of the program's impact within its first month is the Smoketown Dollar Plus, a former Dollar Store whose co-owner Julie Kader decided to start selling fruits and vegetables in response to customer requests. The grant helped Kader purchase display coolers as part of the "Healthy in a Hurry" program, and the store now features a prominent display of fresh, ready to eat fruit and vegetable servings. Located in a low-income neighborhood of Louisville, the Dollar Plus store is the only access that local residents have to fresh fruits and vegetables within walking distance. The City of Louisville is currently screening applications from other stores wishing to expand provision of fruits and vegetables.

Philadelphia, PA

The Pennsylvania Fresh Food Financing Initiative (FFFI) was formed in response to a 2004 paper published by The Food Trust, a non profit organization which advocates for increased access to healthy food for all Americans, titled "Stimulating Supermarket Development: A New Day for Philadelphia." In response to the recommendations outlined in the paper, the City of Philadelphia allotted \$30 million to an innovative grant and loan fund to promote supermarket development (The Food Trust 2010).

The fund has since been leveraged to \$120 million by the Reinvestment Fund, a community development investment group which provides capital for neighborhood redevelopment projects, and is managed by a partnership between The Food Trust, the Reinvestment Fund and the Greater Philadelphia Urban Affairs Coalition (The Food Trust 2010).

According to the FFFI's promotional materials, the initiative "provides grants and loans to qualified food retail enterprises for predevelopment costs including, but not limited to, land acquisition financing, equipment financing, capital grants for project funding gaps, construction and permanent finance, and workforce development." (The Food Trust 2010).

Since 2004, the FFFI has provided over \$40 million in funding to 83 supermarket projects in 34 counties across Pennsylvania, creating or preserving nearly 5,000 jobs (The Food Trust 2010).

New Orleans, LA

In 2007, the New Orleans Food Policy Advisory Committee was formed to address food security and food access issues in post-Katrina New Orleans, and was commissioned to generate a report with recommendations for policy solutions for addressing nutrition and food security issues.

In January 2008, the committee submitted the report “Building Healthy Communities: Expanding Access to Fresh Food Retail” to the City of New Orleans Special Projects and Economic Development Committee, outlining ten recommendations for City and State policy initiatives (New Orleans Food Policy Advisory Committee 2008).

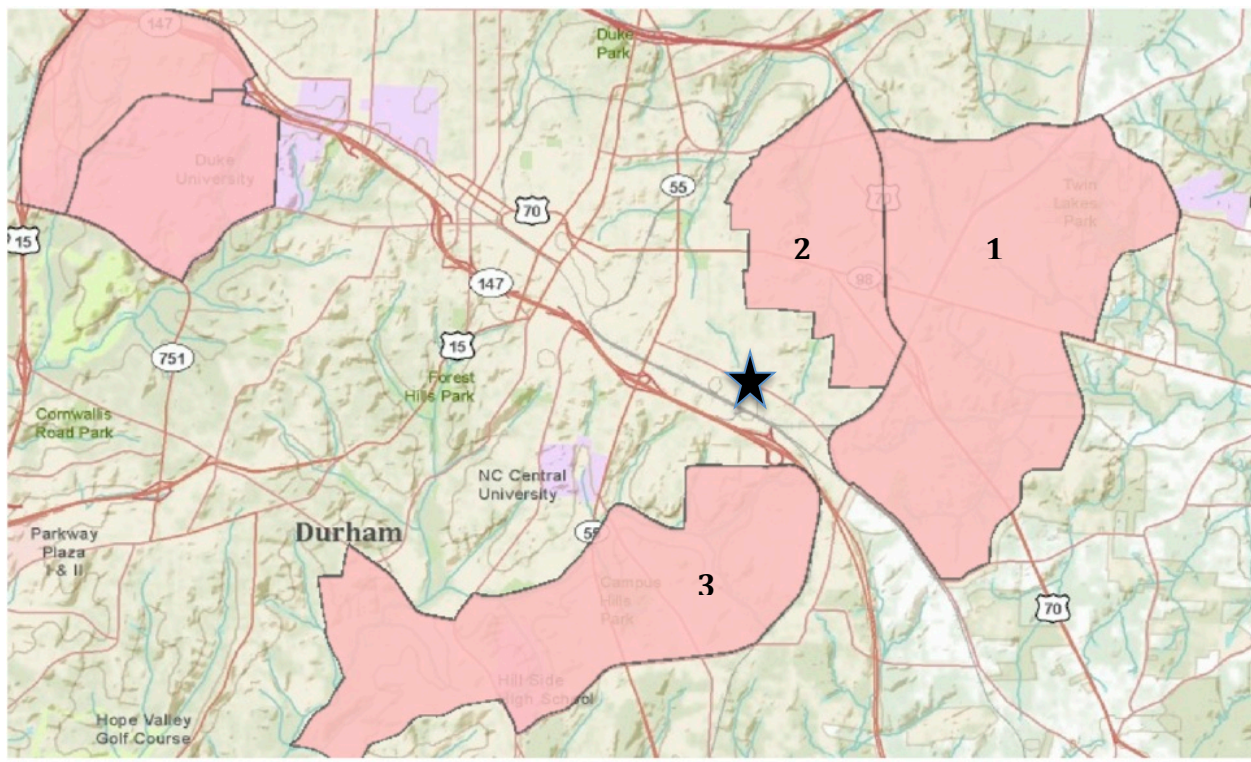
Some of the policies recommended in the report are specific to New Orleans, and the social, political, and economic impacts of hurricane Katrina. Policy recommendations potentially relevant to Durham and to North Carolina are as follows:

1. Provide tax incentives to encourage the sale of fresh food.
2. Prioritize security for supermarkets and grocery stores in high crime areas.
3. Make economic development programs available to fresh food retailers.
4. Address the need for transportation to supermarkets, grocery stores, and farmers markets.
5. Develop a financing program to provide grants and loans to supermarkets, small grocery stores, and other fresh food retailers to enhance healthy food access in underserved areas.

5. Analysis of Nutrition Access in Durham

TROSA Grocery, marked by a star in the map below, is located between three census tracts classified as food deserts by the USDA. In East Durham, two contiguous tracts comprise the Wellons Village, Joyland, Albright, Wedgewood, and Cedar Hills neighborhoods.³ In South Durham, a single tract comprises neighborhoods Campus Hills and Riddle Heights, and the area surrounding Durham Technical Community College.

Map 1: Food Deserts in Durham as Defined by the USDA



Source: USDA Interactive Food Desert Map

The “food desert” in the Northwest corner of the map is actually Duke’s West Campus, and is a statistical anomaly, caused by census reporting of “income” by full-time students, and a lack of grocery stores due to residential dining.

The total population of these three census tracts is 17,246, and the total number of people with low access to fresh food is 6,372. Tract 1, Joyland, has both the highest number of people and the highest percentage of people with low access, low-income people with low

³ Tract 1: FIPS Code 3706300182. Tract 2: FIPS Code 37063001002. Tract 3 FIPS Code: 37063002009

access, children with low access, and senior citizens with low access. Tract 2 has the highest number and highest percentage of households without a vehicle with low access.

Table 1: Characteristics of USDA Food Desert Census Tracts in Durham

	<u>Tract 1</u>	<u>Tract 2</u>	<u>Tract 3</u>
Number of people	6410	6050	4786
Number of people with low access	4054	1538	780
Percentage of people with low access	63.2%	25.4%	16.3%
Number of low-income people with low access	597	427	139
Percentage of total population that is low-income and has low access	9.3%	7.0%	2.9%
Number of children age 0-17 with low access	1209	591	225
Percentage of children age 0-17 with low access	18.9%	9.8%	4.7%
Number of people age 65+ with low access	272	74	70
Percentage of people age 65+ with low access	4%	1%	1.5%
Number of housing units without a vehicle with low access	91	104	49
Percentage of housing units without a vehicle with low access	4.2%	5.1%	2.7%

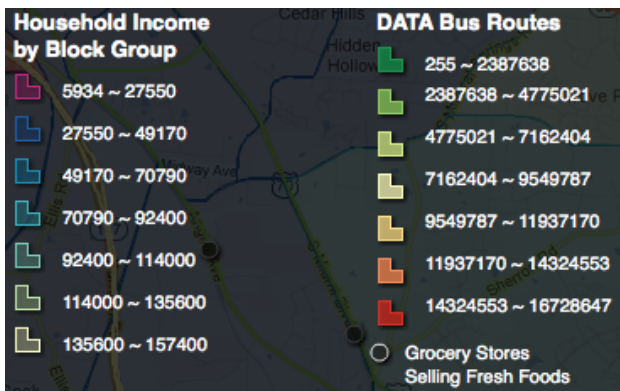
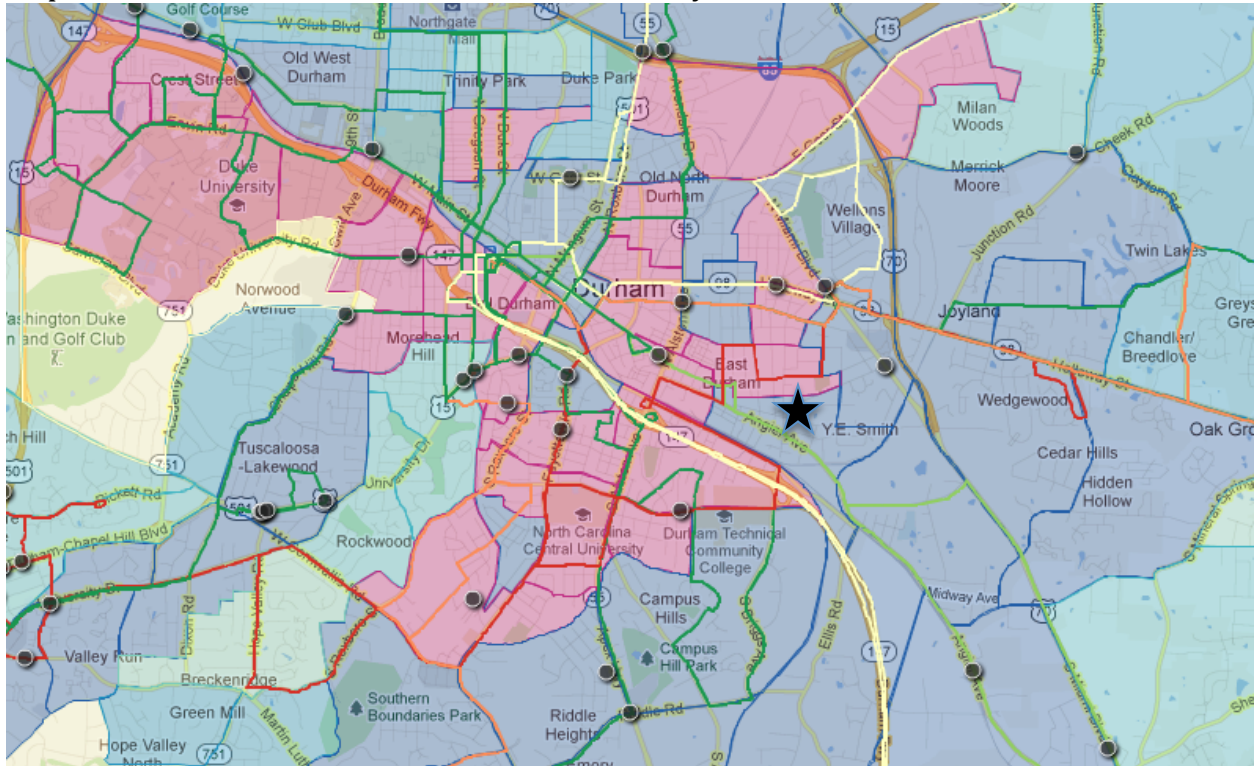
Source: USDA Interactive Food Desert Map

While census level data can be illustrative of a population, neighborhood patterns of income, transportation access, and commerce in Durham do not necessarily follow census lines. The map on the following page presents an overlay of household income level by block group, DATA bus routes, and grocery stores selling fresh food (where fresh food is defined as fruits, vegetables, and dairy). Bus routes are not included in the USDA definition of food deserts, but are an important component of access to fresh food retail for households without access to a vehicle.

Low-income block groups are highlighted in pink on the map, with low-income defined as annual household income of less than \$27,550. The map gives more granular detail into the specific neighborhoods of Durham that experience both low income and lack of grocery stores, or lack of bus routes to a grocery store. For example, the South Durham food desert may actually extend slightly farther North and West than the USDA map indicates, but the high income Hope Valley neighborhood immediately to the West of South Durham’s low-income neighborhoods may exclude these neighborhoods from the official USDA definition, based on the delineation of census tracts.

The map shows that grocery store coverage is progressively lower for East Durham neighborhoods located farther North, particularly in northeastern Old North Durham and the neighborhoods bordering I-85. The same trend appears in South Durham, and the area between North Carolina Central University, northern Riddle Heights, and Rockwood has particularly sparse grocery store coverage.

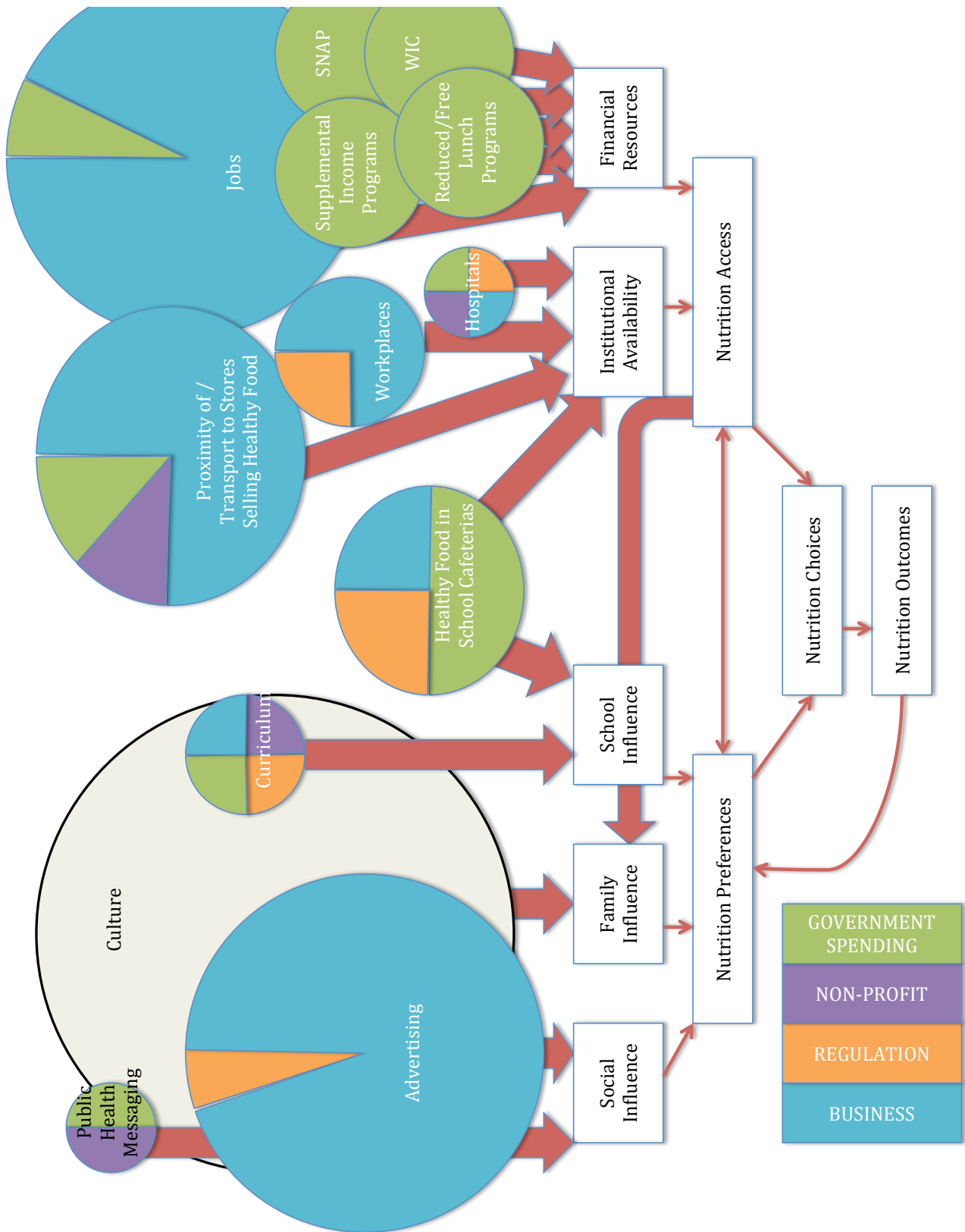
Map 2: Household Income, Bus Routes, and Grocery Stores in Durham⁴



Data Sources: Durham Area Transportation Authority, 2007 Economic Census, 2006-2011 American Community Survey.

⁴ The grocery store data for this map was drawn from the 2007 Economic Census using the industry code 445110: Supermarkets and Other Grocery (except Convenience) Stores. Because the data is five years old, stores represented on the map may have closed, and other stores may have opened. However, my assumption is that the underlying economic trends outlined in the literature review have not changed, and therefore patterns of store locations revealed in this map will still be indicative of current access patterns.

Chart 1: Social Determinants of Nutrition Related Health Outcomes



The impact map on the previous page provides an analysis of the various socio economic factors that contribute to nutrition choices, and eventually nutrition related health outcomes, within a given community. The objective of the impact map is to place the food desert issue, and the existence of grocery store such as TROSA Grocery, which aim to serve an unmet demand for fresh produce, within the greater landscape of potential partners.

Each source of influence over nutrition related health outcomes is represented by a circle, with relative sizes of each circle assigned based on the perceived magnitude of the influence of each source. There is no absolute scale to these sizes, and no underlying data. The weights were assigned based on the author's accumulated knowledge of the social determinants of health through coursework and field experience, in consultation with local stakeholders working in the public health and nutrition space.

Actors in the nutrition related health outcome space are divided into four broad categories; government regulation, government spending, business, and non-profit. The goal of separating and color-coding each of these actors is twofold; first, to give a sense of who the major players are in each source of influence, and second, to highlight the overlapping and at times competing role of the various sectors involved.

The impact map can best be read from the bottom up, beginning from the premise that nutrition related health outcomes are a direct result of nutrition choices, which are a function of nutrition preferences and nutrition access. Rather than defining outcomes as a function of choices and access, I chose to employ the more empowering construct that even in an environment of limited access, individuals still exercise choice in their nutrition intake, albeit among vastly reduced options relative to individuals experiencing broader access.

Access is determined by two factors – institutional availability of nutritious foods, and economic resources to purchase nutritious foods. Institutions here are defined as grocery stores, bus routes linking communities with grocery stores, workplace cafeterias and vending machines, school cafeterias and vending machines, and food in hospitals. Proximity to grocery stores selling healthy foods, including bus routes linking communities to these stores, is estimated to be the single largest institutional determinant of access.

Within the grocery store category, the business sector is the single most influential actor, as the decision to open or close a grocery store in a particular neighborhood is largely a private decision. Government spending also plays a role, as tax incentives for businesses in low income neighborhoods, and subsidization of some bus routes, can help to determine commercial patterns. Finally, the non-profit sector plays a role in operating bus routes in many cities, including Durham, and in the case of TROSA, entering the fresh food retail business.

Job availability and wage levels are the single biggest determinant of household economic access to fresh foods. The business sector is largely responsible for the location, availability, and terms of jobs; however, government spending also plays an important role in economic development incentives to bring new jobs to a given region.

Supplemental food and income programs are also important determinants of household economic resources for food consumption, and are 100% government financed.

Individual nutrition preferences are determined by social influences, family influences, and school influences. Both social and family preferences are primarily determined by the greater culture, which is not directly determined by any of the four actors identified in this analysis, but is rather transmitted across generations and is a function of ethnicity, regional background, and socio-economic status of one's ancestors, as well as accumulated popular culture from past deliberate actions (such as the influence of USDA food pyramids which have since been revised, or the influence of advertising campaigns conducted during one's childhood or prior to one's birth.)

After culture, advertising is the single biggest determinant of nutrition preferences, and advertising messaging is primarily determined by business interests, with some influence of government regulations, such as what claims can and cannot be made in advertisements, and whether advertising is allowed in schools or, for some products, during children's television programming. Public health messaging, from government agencies as well as non-profits, plays a much smaller role in social influence on nutrition preferences.

School influence is a function of both curriculum around food, and what food is served in school cafeterias. Increasingly, non-profits are entering the nutrition curriculum space, while in some states, curriculum is sponsored by private business. Business and regulation also comprise a significant portion of cafeteria offerings, as some schools allow the sale of fast food on school grounds, and all schools have nutrition content requirements for government funded school meals.

As the impact map indicates, there is multidirectional interaction between many of these influences. For example, over time access will change family influence, as children raised in lower income households may come to prefer cheaper foods, and pass these preferences on to their children. Nutrition outcomes may in the long-term influence nutrition preferences, as adverse health impacts will motivate healthier eating habits.

6. Summary of Findings

- Durham has three census tracts defined by the USDA as food deserts, and additional low-income neighborhoods with sparse grocery store coverage.
- Research indicates that residence in a food desert may or may not be correlated with increased cost of groceries, decreased consumption of fresh fruits and vegetables, and increased incidence of obesity and related diseases.
- Access to fresh food retail is one of many socio-economic factors influencing nutrition choices and nutrition related health outcomes.

- Research suggests that there is latent demand for fresh foods in food desert neighborhoods, provided that fresh foods are offered at a competitive price point.
- The underlying economies of scale in the grocery industry make competitive pricing difficult for a small grocery.
- Cities, counties, and foundations across the country are experimenting with models to incentivize fresh food retail in underserved areas.

7. Public Policy Implications

Food deserts are caused by private business decisions in reaction to market forces, specifically the economies of scale experienced in the grocery industry. The lack of grocery stores in low-income neighborhoods should not be interpreted as a lack of demand. In fact, there is latent demand for fresh foods in low-income neighborhoods, provided that these foods can be sold at a competitive price point.

As such, public-private partnerships to reduce the costs of operating a fresh food retail business in a low-income neighborhood may be able to sufficiently incentivize grocery stores to locate in these neighborhoods. The opening of new stores in low income neighborhoods will provide the additional benefit of creating new jobs and expanding the tax base.

8. Recommendations

The following recommendations are not targeted to a single organization, but provide a high-level view of the types of programs and partnerships that would encourage increased retail of fresh foods in low-income neighborhoods in Durham.

1. Make available economic development funds specifically for fresh food retailers in underserved areas.

The City of Durham currently offers economic development funding to open, expand, or improve businesses in target neighborhoods. Developing a program specific to fresh food retail, such as subsidized funds for adding coolers to existing small neighborhood stores, would reduce the entry costs of setting up fresh food retail and leverage existing commercial patterns within these neighborhoods.

Fresh food retail incentives could be explored at the City level, through the City of Durham Office of Economic and Workforce Development, by leveraging federal grant programs, through the USDA Economic Development grant programs, or at the state level, through the State of North Carolina Economic Development Office.

2. Develop a “patient capital” financing program to provide grants and loans to supermarkets, small grocery stores, and other fresh food retailers to enhance healthy food access in underserved areas.

“Patient capital” refers to investment funds and loan programs that intentionally lower the annual rate of return to allow for extended repayment periods, in expectation of social and or/environmental benefit above the expected financial benefit.

One of the drivers of economies of scale in the grocery industry is the fact that low unit margins on food products mean that a large volume of products must be sold every day to cover fixed overhead costs. Patient capital for financing fixed overheads would reduce the monthly overhead burden by extending the repayment period without overburdening the store with interest accumulation. Lowering monthly fixed overheads would reduce some of the pressure for volume, and may allow private retailers to enter smaller neighborhood markets.

There is already a movement toward patient capital in the triangle area, especially capital for building a more sustainable food system. Potential partners for this recommendation could include Self-Help Credit Union, the Abundance Foundation, Slow Money NC.

3. Work with large grocery stores in the area to explore the financial viability of opening “satellite” stores, to take advantage of economies of scale.

Large grocery stores already enjoy the benefits of scale, with lower unit costs due to high volume purchasing. Established retailers also have a competitive advantage in fresh food retail, as prices have been carefully determined based on customer willingness to pay, through a level of data collection and analysis that is beyond the capacity of small retailers.

Grocery store chains will have set monthly target margins to meet when evaluating potential new locations. However, public funds or patient capital to incentive strategic location of new stores would change this cost/benefit analysis, and may make it profitable to enter a smaller, previously underserved market.

Implementing this recommendation will require a close partnership with at least one established grocery store, to understand the cost constraints and capital requirements for identifying a viable location. This recommendation would be most appropriately pursued in conjunction with the above recommendation, to tailor the patient capital program to meet the specific needs of satellite stores managed by large grocery retailers

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