FAST FOOD, SUPERMARKETS, AND OBESITY IN THE INNER CITY: A STUDY OF FOOD ACCESS AND HEALTH IN SOUTH LOS ANGELES

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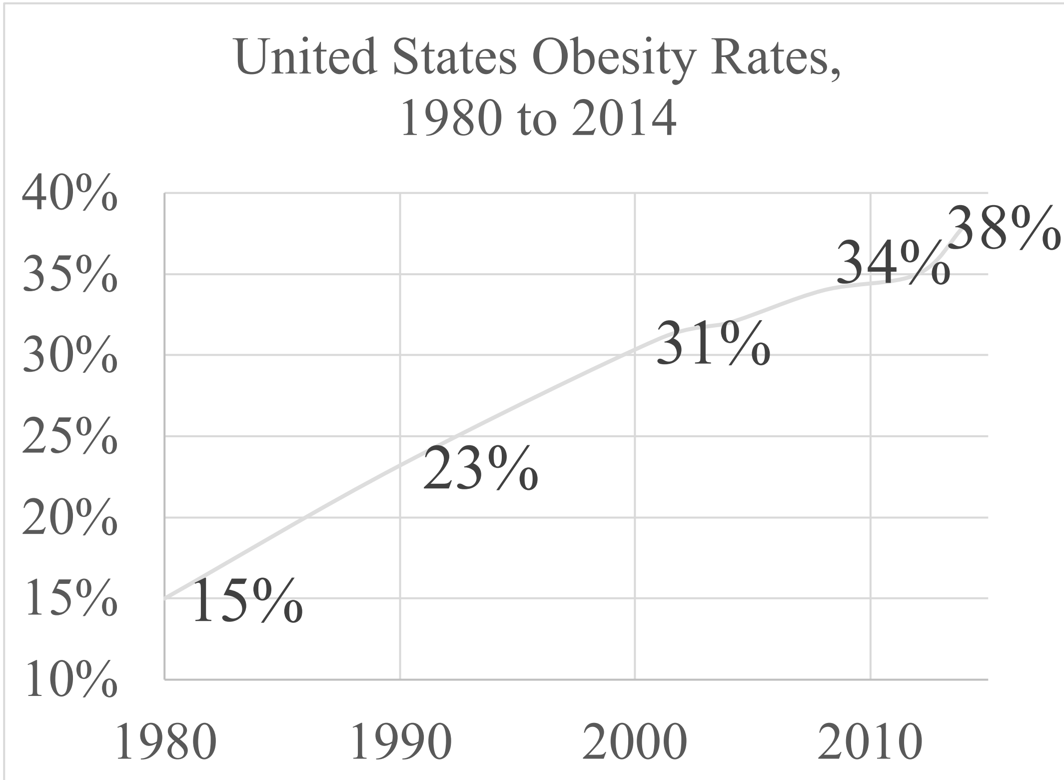
SUMMARY: The U.S. is experiencing an obesity epidemic. Obesity rates are especially high in low-income, inner-city areas. Many inner-city neighborhoods have been labeled "food deserts," where affordable, nutritious food is scarce. South Los Angeles has been labeled a food desert as it is reported to lack full-service supermarkets but has a growing number of fast-food restaurants. This paper examines some of the claims about food access and health, provides new data on the availability of supermarkets and fast-food restaurants in South Los Angeles, and reviews solutions for improving the health of South Los Angeles residents through changes in food access.

Introduction

Obesity rates in the United States have increased for several decades, with a dramatic rise after 1980. Obesity is defined as a Body Mass Index (BMI) of 30 or more. Adult obesity rates rose from 15% in 1980 to 31.3% in 2001 and to 38.1% in 2014 (Fryar, Carroll, & Ogden, 2016; see Figure 1 below). The U.S. is among the most obese nations on earth and is the most obese developed nation (OECD, 2017). In California, obesity rates are lower than in most states, but have also grown, for example, for adults, from 19.3% in 2001 to 24.8% in 2012 (Wolstein, 2015). This is leading to new challenges for grocers and restaurants, as government interventions are pursued in order to combat obesity.

Obesity rates in Los Angeles County have also increased for adults from 13.6% in 1997 to 22.2% in 2008. Obesity rates are much higher in low-income neighborhoods. South Los Angeles City Council Districts 8 and 9 have adult obesity rates of 35.1% and 36.7%, respectively. Child obesity rates are also linked to geographic locations, with a low rate of 3.4% in the affluent community of Manhattan Beach to a high rate of 38.7% in low-income Walnut Park (County of Los Angeles Public Health, 2011).

Obesity is considered a disease by the World Health Organization (Wang & Beydoun, 2007). It is also linked to two of the highest causes of death in the United States: heart disease (#1) and diabetes (#7) (Centers for Disease Control, 2016). Obesity is reported in medical journal articles as a public health epidemic (Wang & Beydoun, 2007). The health costs associated with current levels of obesity may be larger than those associated with smoking tobacco or excessive drinking (Strum, 2002). Health experts at the global and national level are advocating government interventions (Kleinert, 2015; OECD, 2017; World Health Organization, 2016).



Source: *https://www.cdc.gov/nchs/data/hestat/obesity_adult_13_14/obesity_adult_13_14.pdf*

Figure 1. United States obesity rates

The rise in obesity is linked to changes in both diet and exercise. Here, the impact of changes in the food environment is examined. A major problem in South Los Angeles is seen as a shortage of affordable nutritious food. This is a common problem in low-income, inner-city neighborhoods across the nation. South Los Angeles has had high poverty rates for more than 25 years. Across South LA, the poverty rate was 34 % in 2013 (Pastor et al., 2016). Many low-income neighborhoods have been labeled "food deserts" because of a lack of affordable nutritious food. Part of the problem has been a shortage of full-service supermarkets. Below, it is shown that a shortage of supermarkets in South Los Angeles has persisted over the last 25 years. What has changed is the availability of chain fast-food restaurants.

Across the United States, full-service supermarkets that are part of major chain stores have been leaving low-income, inner-city neighborhoods. Full-service supermarkets are larger stores that have a wide variety of foods—from canned foods to dairy to fresh meat to fresh fruits and vegetables. They are likely to have healthy choices as well as high-fat-high-calorie foods. The chain stores have been moving to the suburbs, and the suburbs have expanded. This trend has been going on for decades and has been called "supermarket redlining" by Eisenhauer (2001). This exodus does not reflect a lack of demand for food in our inner cities. In South Los Angeles, residents often must leave their neighborhood to shop at a supermarket. This inner-city shortage reflects the attraction to major chain supermarkets of higher mark-ups that more prosperous neighborhoods will tolerate (Larson, 2003).

A consequence of this supermarket shortage is the reduced availability of fruits, vegetables, and quality meat in low-income neighborhoods. This shortage of nutritious food is seen as an important contribution to the rise in obesity in inner-city neighborhoods (Chen et al., 2010).

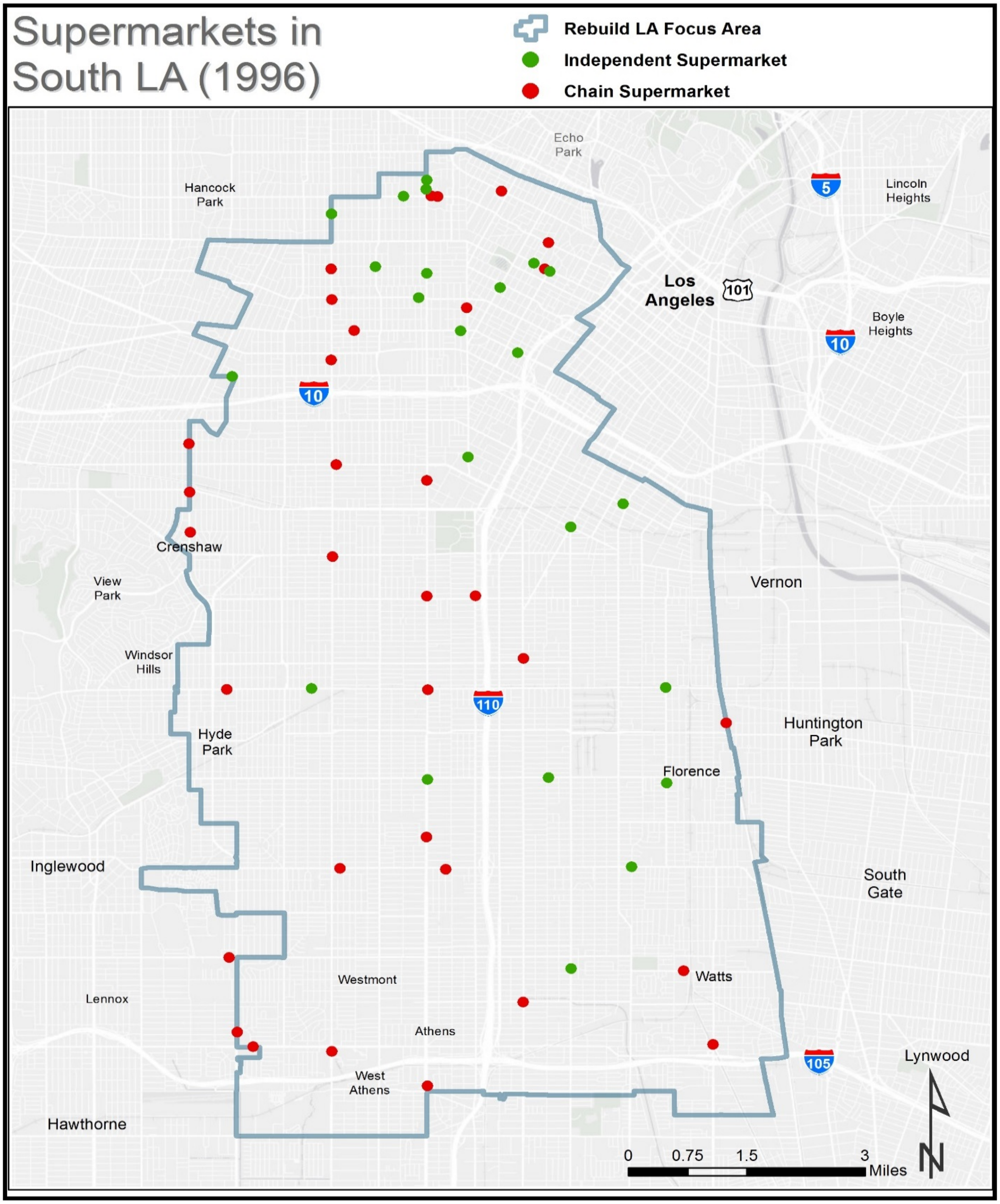
Chain Supermarkets in South Los Angeles

This study identifies the supermarkets today and in 1995 in an area that was studied by Rebuild LA (RLA) after the 1992 Los Angeles riots. The area examined is shown on the maps in Figures 2 and 3. This is the RLA Retail Focus Area and represents the neighborhoods that had the greatest property damage due to the 1992 riots. RLA reported in 1996 that there were 32 major chain supermarkets in the RLA Retail Focus Area (RLA, 1996). This area included South Central LA plus neighborhoods north of the I-10 freeway—largely Koreatown and Pico-Union. This area was later examined by Amanda Shaffer (2002), who found only 30 major chain supermarkets. Today, there are 24 major chain stores. There were 23 independent supermarkets reported in 1996, with a total of 55 full-service supermarkets in 1996 (shown in Map1), serving a population of over 700,000 (U.S. Census, American Community Survey). The total number of supermarkets is 56 today (shown in Map 2), but is 60 if we add in stores near the RLA Focus Area that are in Inglewood. The majority of supermarkets today are independent.

Los Angeles had a long history of development of local chains and independent stores, which was followed by a wave of mergers in the 1980s and 1990s that greatly concentrated ownership of supermarkets. In 1992, there were mostly independent and small chain, full-service supermarkets in South Central. The merger waves created the major chains we see today in Los Angeles. The dominant grocery chain today is owned by Kroger Corporation, which operates as Ralphs and Food 4 Less. The other major chain stores, Vons and Albertsons, are owned by a private investment company Cerberus Capital (Peltz, 2015). The wave of mergers brought major chains into South Central as they bought out local chains with some stores in South Central (Larson, 2003). After taking over stores located in South Central, Ralphs divested of some of the stores and stayed with mostly warehouse stores under the Food 4 Less brand. Independents have taken over some of the Ralphs stores and have added some new supermarkets.

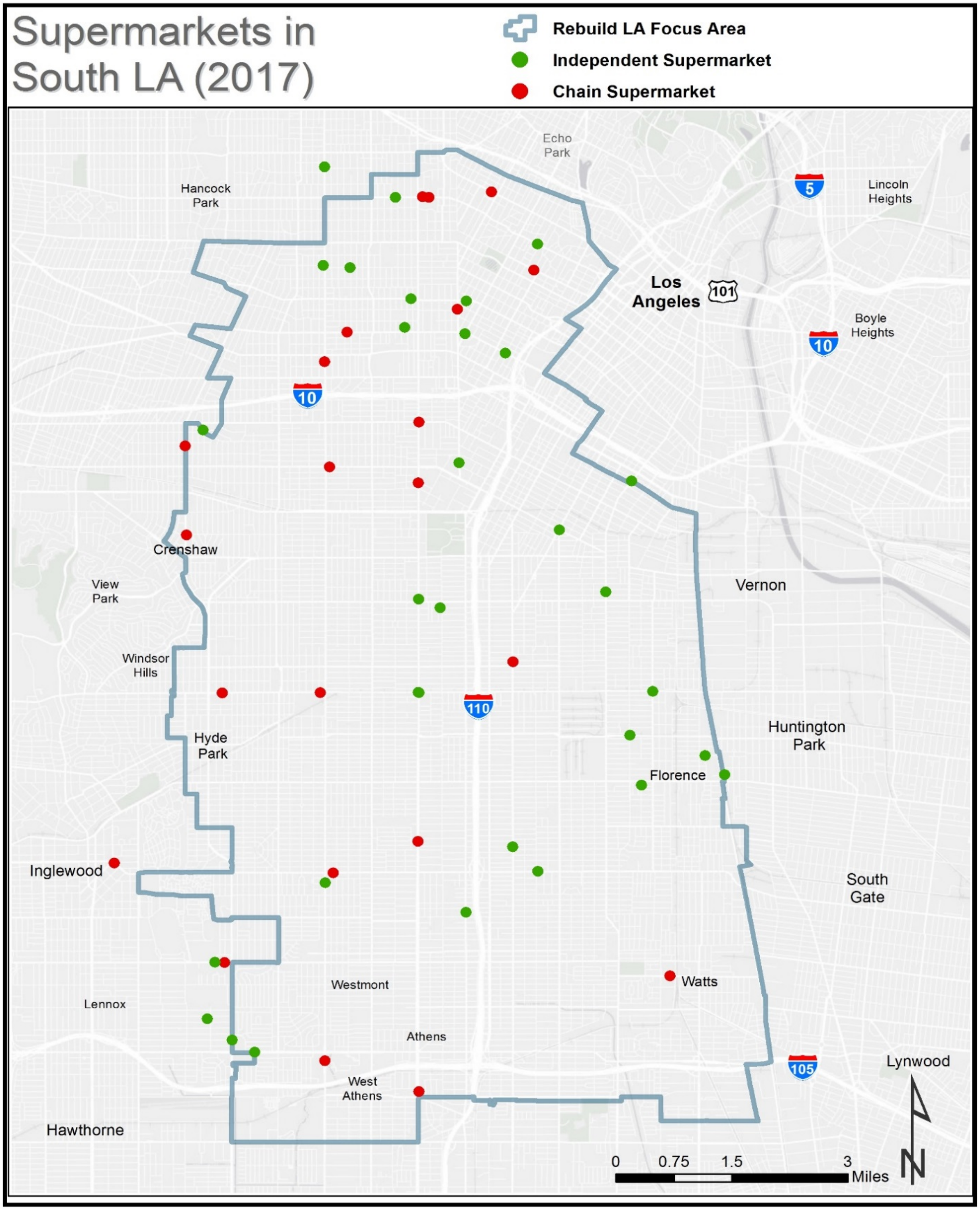
The stores that serve South Central have been viewed collectively as inadequate for the needs of the population. An RLA survey done in 1995 of the retail needs of residents of the RLA Focus Area revealed that a lack of supermarkets was the number one problem facing residents. Residents were traveling up to five miles to get to a full-service supermarket. Of the residents surveyed, 25% had to use public transportation to get to a supermarket (RLA, 1996). Much grocery shopping occurred outside South Central due to the shortage of supermarkets. The RLA study of the demand and supply conditions for food in South Central estimated that 40% of the food purchased by residents had to be bought outside South Central. RLA estimated that South Central needed thirty more full-service supermarkets to satisfy resident demand in 1995. A more recent study by Community Health Councils compared travel access to grocers in South LA and West LA and found access was much easier in West LA (Bassford et al., 2010).

For access to nutritional food, that food has to be affordable. It is often assumed that major chain supermarkets offer food at prices lower than at independent supermarkets. The chains do have a history of offering lower prices than small grocery stores and mom-and-pop stores. The major chains often have an advantage in paying lower prices for their inputs. For years, it has been argued that the poor pay more when living in ghettoes and barrios. This may be true for many purchases, but may not be true for food in independent supermarkets.



Sources: GIS map by Mario Garcia, UCLA Center for Neighborhood Knowledge. Data are from RLA (1996).

Figure 2. Map 1: Supermarkets in South Los Angeles, RLA (1996)



Sources: GIS map by Mario Garcia, UCLA Center for Neighborhood Knowledge. Data are available from authors.

Figure 3. Map 2: Supermarkets in South Los Angeles in 2017

Survey results from different cities have different conclusions. Chung and Meyers (1999) found higher food prices in inner-city grocery stores in Minneapolis and St. Paul. Ambrose (1979) found no difference between inner-city stores and suburban stores in Omaha. Hayes (2000) found that prices in inner-city neighborhoods in New York City were not higher. In studies where the poor have been found paying higher prices, small grocery stores in inner cities are often being compared to larger suburban, full-service supermarkets. Larson (2003) compared full-service supermarkets that were independent to similar-size, major chain supermarkets and found that the independent markets had much lower prices on fresh fruits, vegetables, bread, and eggs and similar prices on milk and sodas. This price study was repeated by the author in the Fall of 2016 with similar results. The independent supermarkets in South Los Angeles do have a reputation for low prices compared to the major chain stores.

The Rise of Fast-Food Chain Restaurants in South Los Angeles

Supermarkets compete with restaurants as well as with small markets, farmer's markets, street vendors, and even with liquor stores, in providing food. Since 1995, as some chain supermarkets left South Central, fast-food restaurants were coming in. While supermarkets remain the major source of food, chain restaurants are getting a growing share of food sales.

Before 1992, national chain fast-food restaurants were very rare in South Central. Around 1994, McDonald's opened its first restaurant in South Central. Since 1992, a number of other national and regional fast-food chains have built stores in South Los Angeles. This has increased the variety of foods available and has aided full-time workers in saving time from household food preparation. This has also benefited those without access to a kitchen. EBT cards can be used in many fast food restaurants in low-income neighborhoods. These cards are used for food stamps and cash welfare benefits. People with no kitchen can spend food-stamp money at participating McDonalds. There are also more jobs for low-skilled workers.

In 2008, the City of Los Angeles enacted a partial and temporary ban on new stand-alone, chain fast-food restaurants in South Los Angeles. The ban reflected the view that chain fast-food restaurants were themselves "serious public health problems" (Office of the City Clerk, 2008). The ban also reflected a concern that the presence of fast-food restaurants was denser than in more affluent neighborhoods. The ban was made permanent in 2010. The ban was limited to stand-alone restaurants. Restaurants connected to other buildings (as in malls) were still allowed. Sturm and Hattori (2015) report that 17 more fast-food restaurants were built in South Los Angeles after the ban. The ban may provide the community with a signal that fast food represents a health hazard, but seems ineffective in halting the growth of fast-food outlets. Community Health Councils has recommended further restrictions on chain fast-food restaurants (Bassford et al., 2011).

We used Los Angeles County Public Health data to identify and count the number of chain fast-food restaurants in South Los Angeles and in Los Angeles County overall (Los Angeles County, 2017). The number of chain fast-food restaurants in South Central today is higher per capita than across Los Angeles County. There are almost 19 fast-food restaurants per 100,000 residents in Los Angeles County. For South Los Angeles, there are almost 27 fast-food restaurants per 100,000 residents.

Discussion

This study has shown that just as there was a shortage of full-service supermarkets in South Central (the RLA Focus Area) in 1996, there is still a shortage. Meanwhile, South Central and South Los Angeles have gone from hardly any chain fast-food restaurants to having a higher per capita number of chain restaurants than Los Angeles County overall. The shortage of supermarkets and the abundance of fast-food restaurants are both identified as contributing to an obesity epidemic.

The shortage of supermarkets may not represent a lack of opportunity for profit. In South Los Angeles, there is a major chain, Ralphs, that has stayed with most of the supermarkets acquired through mergers and has even built new discount supermarkets (Food for Less). There are also small independent chains that have expanded their supermarkets in South Los Angeles while offering competitive prices. The shortage of supermarkets may reflect a mis-assessment of profit opportunities by other major chains and a difficulty with financing for the small independent supermarkets. There are also other barriers that have been identified and solutions proposed in a report to the City of Los Angeles (Jordan, 2009). Urban planners need to think of supermarkets as important neighborhood institutions and look for ways to help bring more supermarkets into inner-city neighborhoods like South LA. A principle problem is simply finding sites large enough to be developed for a standard size supermarket. This can be done. The Juanita Tate Marketplace is an example of successful development in one of the poorest parts of South LA. The Marketplace has an independent grocer, Northgate, plus the kind of stores that are found in more affluent neighborhoods: CVS Pharmacy, Starbucks, Panda Express, Fatburger, and others. But, it took seventeen years to create the Marketplace.

South LA has long lacked investment by major chain stores of all types. Community organizations have expressed frustration over the inability to get major corporations to invest in low-income neighborhoods. McDonalds, Burger King, and other fast-food chains are bringing new businesses. This may not be good for diets, but does bring some pride to neighborhoods that lack brand name retailers and shows that there are opportunities for investment in South LA.

Sturm and Hattori (2015) found no impact of the City of Los Angeles ban on new chain fast-food restaurants. Plus, small mom-and-pop restaurants (mostly serving fast food) that number in the hundreds in South Los Angeles are not subject to the ban. There are alternatives to the ban on chain restaurants that could be more effective. Sturm and Cohen (2009) state that a primary cause of empty calories is drinking sugar-sweetened beverages (SSBs). The World Health Organization (WHO) advocates taxing SSBs globally. The WHO also recommends a number of other government interventions aimed at combatting obesity epidemics in many nations (World Health Organization, 2015). A different approach than a ban was taken by the City of Berkeley when it placed a tax on SSBs in 2015. The SSB tax targeted beverages that are linked to obesity. Falbe (2016) states that SSB "consumption has become a public health priority." In a study of Berkeley after the SSB tax was imposed, Falbe found that SSB consumption has been reduced significantly in low-income neighborhoods while water consumption increased. The tax is one cent per ounce and is associated with reduced SSB consumption of 21% and with increased water consumption of 63% in Berkeley.

The obesity epidemic has costs to society that exceed private costs (known in economics as negative externalities). When individuals make choices that are harmful not just to themselves, but to others as well, economists accept that government action may be justified on the grounds of improvements in efficiency. Taxes on cigarettes and alcohol are seen as beneficial to society by curbing harmful behavior that is costly to society and not just to individuals. It is not clear what intervention would be efficient in combating obesity. The Berkeley experiment shows that a SBB tax can be effective and may represent an alternative to trying to limit the number of fast-food restaurants. Another alternative may be an increase in education regarding the links between diet and health. States, such as California, with successful anti-smoking campaigns have used bans, health education, and taxes to discourage smoking (Pierce, White, & Emory, 2011). The obesity epidemic is forcing businesses and government to work on solutions. Here, a tax may be better than a ban, but other interventions have to be expected.

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