



# Fast Food Restaurant Policy in a Food Desert: *A Health Impact Assessment*

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**Community Health Councils (CHC)** is a non-profit, community-based health education and policy organization. Established in 1992, our mission is to promote social justice and achieve equity in community and environmental resources to improve the health and well-being of underserved populations.

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# ***Acknowledgements***

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**In Memoriam**

This project was started under the guidance and leadership of founding Executive Director **Lark Galloway-Gilliam**, who led Community Health Councils from 1992 through her passing in December 2014. We did not have the benefit of having her input all the way through completion of this project, but know that this and all future CHC activities and publications reflect the quality of work pioneered by her leadership and dedication to the communities we serve.

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# Executive Summary

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From 2008 to 2010, the City of Los Angeles instituted an Interim Control Ordinance (ICO) to temporarily halt the development of new stand-alone fast food restaurants in South LA. This policy decision came about upon the determination that South LA's high concentration of fast food establishments was inconsistent with land use policies that intended to promote commercial diversity. Stemming from this moratorium, was the policy proposal for fast food density regulations to be considered in the New Community Plan Updates, starting with the West Adams-Baldwin Hills-Leimert Park community plan and then expanding to the other South LA plans.

This HIA study was conducted from March 2011 to February 2012, while the West Adams community plan update process was underway, knowing that the other South LA community plans would be updated next. Community Health Councils along with a multi-sectorial steering committee of community-based organizations, university faculty and public health advocates led a health impact assessment (HIA) study to project the impact of proposed changes to South LA's existing fast food density policies on health-related indicators in the community.

The primary research questions for this study were:

- (1) What impact, if any, has the General Plan Amendment's regulation of fast food restaurant development had on the nutrition resource environment and health of South LA residents?
- (2) What impact, if any, would the potential revisions to the fast food regulations in the updated Community Plans have on the nutrition resource environment and health of South LA residents?

To answer these questions the steering committee collected data on low-income communities in South LA. Each of these communities had a high density of fast food as well as high rates of nutritionally-related health conditions such as overweigh/obesity and diabetes. Our primary objective was to assess the potential impacts of fast food density restrictions on the South LA nutrition resource environment.

## Key Findings

Findings from the study revealed that: (1) the potential health outcomes of the proposed new community plans are consistent with the existing land use policy goals of protecting the health and welfare of residents, and (2) the West Adams community plan is largely consistent with the community's desire to increase the number of amenities and healthy food resources in the community. However, additional longitudinal data are needed to assess the original moratorium's impact on healthy food access and health outcomes in South LA. The moratorium did slow the degradation of South LA's food resource environment, but healthy food options remain difficult to access even after the policy was adopted.

# Key Policy Recommendations

Based on stakeholder feedback on this study's findings, the steering committee developed the following key recommendations:

## 1) Expand Fast Food Definitions and Forgo Geographic Exemptions

- Expand fast food restaurant policies to include all fast food restaurants in South La, not just stand-alone restaurants, and forgo exemptions from the area's current and future fast food density standards. *Defining fast food establishments narrowly allows the industry to find unique ways to adapt to continue developing and existing in communities, and exempting certain geographies can have harmful impacts on the boundaries of the exemption locations.*

## 2) Incentivize Healthy Food

- Exempt fast food restaurants with menus that meet "Healthy Restaurant Guidelines" from fast food density requirements. *By exempting fast food establishments that meet Healthy Restaurant Guidelines from fast food density requirements, the community plan can increase the density of healthy food retailers.*

## 3) Establish Buffer Zones around Schools

- Expand existing regulations to prohibit fast food restaurants in South LA from locating within a half mile of all schools in the region. *By establishing buffer zones around schools, communities can create health promoting environments for students and their families. One such tool is the Healthy Kids Zone (HKZ) which promotes a suite of nutrition and wellness policies within a ½ mile buffer of a school.*

## 4) Assess Health Impacts

- Integrate Health Impact Assessments into the Department of City Planning's program and project review process. Conducting an HIA should become part of the process used to grant permission for new development. *Incorporating HIAs into the review process will foster the Department of City Planning's goals of partnering with Angelinos to transform the city into a "collection of distinctive, healthy and sustainable neighborhoods".*

# From Research to Action

With nutritionally-related health conditions on the rise, and a proliferation of fast food especially in low-income communities, it is important for community members and health advocates alike to monitor and influence city planning processes to ensure that they reflect the desires and needs of the community. The community played an active role in the development of the West Adams community plan update, and lessons can be learned from that process for other community plan updates. This HIA can serve as a tool for

other communities to advocate for health promoting resources in their communities through the community plans.

We encourage other advocates and policy decision makers working on fast food density regulations to utilize this report in the following ways:

- 1. Utilize the recommendations and key findings from this report to inform future fast food density regulations in urban environments across the nation. Findings from this study could be used by city planners and health advocates as they revealed resident perceptions of the existing food retail environment, fast food consumption behaviors, and factors that influence those behaviors. Results from this study's analysis revealed that there was a desire to increase the number of healthy food options and provide for a better mix of neighborhood amenities in South LA.**
- 2. Build upon the community-led process that guided the development of this study so that it could be replicated by other community stakeholder groups or HIA practitioners interested in utilizing HIA as a tool. We encourage others to recognize the value of incorporating those most impacted by a proposed policy in the policy development process.**



# Introduction

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Literature linking environmental influences to health outcomes can be traced back to the 19th century when medical scholar Rudolf Virchow coined the concept, “social medicine” while analyzing the influence of environmental conditions on the prevalence of disease.<sup>1</sup> In the late 1960s, this ecological approach to health reemerged in the writings of David Mechanic, and his “social theory of mortality” led medical professionals to focus on the environmental influences of psychological and physical health.<sup>2</sup> Today, the “social determinants of health” theory links an individual’s social, physical, and political contexts to their health and well-being.<sup>3</sup>

One’s zip code, and the land uses and health resources within that zip code, are a significant social determinant of health. Residential proximity to food resources has a major impact on nutrition behaviors and nutrition-related health outcomes in a community.<sup>4,5</sup> A 2008 study of retail food locations and health indicators in California indicated that people who live near a higher concentration of fast food restaurants and convenience stores than grocery stores and other healthy food retail outlets have a greater prevalence of obesity and diabetes regardless of individual or community income.<sup>6</sup> The 2010 American Dietary Guidelines report concluded that communities with higher concentrations of fast food or quick-service restaurants tend to have higher Body Mass Indexes (BMI), a measure commonly used to assess obesity.<sup>7</sup>

South Los Angeles, as defined by the City of Los Angeles’ community plan areas,<sup>a</sup> is a culturally rich and diverse urban community with the highest concentration of African-Americans in the city (31%) and an even larger Latino population (61.3%).<sup>8</sup> South LA encompasses some of the wealthiest and poorest households in the city.<sup>9</sup> Despite this diversity, the area has a relatively homogenous food environment: 76% of its restaurants are designated “fast food” compared to 47% in Los Angeles County as a whole.<sup>10</sup> Health indicators for 2010-11 show that South LA also has one of the two highest rates of nutrition-related chronic disease in LA County including adult obesity (33%), childhood obesity (29%), adults diagnosed with hypertension (28%)<sup>11</sup>, as well as the lowest life expectancy (75-79 years) in the City of Los Angeles.<sup>12</sup>

The lack of quality and diverse food retail outlets has resulted in South LA being labeled a “food desert.”<sup>13</sup> The Los Angeles City Planning Department determined that South LA’s high concentration of fast food restaurants was “inconsistent” with land use policies meant to promote commercial diversity,<sup>14</sup> and the City of Los Angeles instituted an Interim Control Ordinance (ICO) that temporarily banned the development of new stand-alone fast food restaurants in South LA from 2008 to 2010.<sup>15</sup> The ICO, or moratorium, was followed by a General Plan amendment limiting new stand-alone fast food restaurants within a ½-mile radius of an existing fast food restaurant, preserving finite commercial land parcels for potential

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<sup>a</sup> According to the City of Los Angeles, the West Adams-Leimert Park-Baldwin Hills Community Plan Area, South Los Angeles Community Plan Area and Southeast Community Plan Area form the city boundaries of South Los Angeles.



development of other food retail formats. Stand-alone fast food restaurants were identified as freestanding restaurants that did not share walls with other establishments.

## Potential Changes to Existing Policies

The Planning Department concluded that South LA’s proliferation of fast food was “detrimental to the quality of life of the residents, which, if unabated, may [have led] to eroding public welfare and good planning.”<sup>16</sup> LA City Planning is working actively to improve health and sustainability through land use and design by updating the city’s 35 community plans, including the three areas that make up South Los Angeles: West Adams-Baldwin Hills-Leimert Park, South Los Angeles, and Southeast Los Angeles. Community Plans serve as blueprints for land use policies, development guidelines, and design parameters for specific neighborhoods and communities, and are typically updated every ten to twenty years. The draft West Adams-Baldwin Hills-Leimert Park (West Adams) Community Plan was the first of the three South Los Angeles community plans to be completed in 2013. The West Adams plan was formally adopted in June 2016. The South and Southeast plans are slated to be completed in 2017.

**Figure 1: Summary of Fast Food Density Regulations in South LA**

Policy	General Plan Amendment (2010)	West Adams New Community Plan (2013)
<b>Stand-Alone Fast Food Restaurant Density</b>	1/2-mile distance requirement for free standing fast food restaurants from any fast food restaurant	1/2-mile distance requirement between free standing fast food restaurants only
<b>Exemptions</b>	Council District 10 North of 10 Freeway	Entire CD 10 portion of West Adams except in TODs and schools
<b>Proximity to Transit Oriented Development (TOD)</b>		1/4-mile density boundary in designated TOD areas
<b>Proximity to Schools</b>		Restriction of fast food restaurant development adjacent to or near schools in designated areas
<b>Fees</b>	\$23,000 exemption filing fee	Approximately \$17,000 exemption filing fee

While many factors have contributed to South LA’s poor health outcomes, this study focuses on the impact of the existing fast food density regulation and the potential impact on South LA’s food resources, intermediate health outcomes, and environmental factors should it be revised. The goal of this analysis is to inform policy development long-term as part of an overall strategy to improve the food environment and ultimately nutrition-related health in the community.

## Methodology

Health Impact Assessment (HIA) has emerged as a process-driven, evaluative tool for determining the scale and direction that prospective policies, plans, and projects could have on health if implemented. This tool, widely promoted by both the World Health Organization (WHO) and the Centers for Disease Control and Prevention (CDC), is being used increasingly to impact policy and planning decisions.

The community plan updates for South Los Angeles overall could include revisions to the ordinance that sets density standards for stand-alone fast food restaurants. This HIA analyzed the impact of the current density standards and potential revisions, as well as identifies solutions to improve outcomes on health. HIAs utilize a comprehensive mix of tools, methods, and stakeholder engagement that vary with the unique dynamic of communities involved and the nature of the policies and projects analyzed. This study followed the standard five-stage HIA process, but also utilized a community-based approach that leveraged the active engagement of stakeholders throughout every stage. The standard five stages include: screening (determining whether an HIA is needed), scoping (determining the parameters for the study), assessment (conducting research to determine outcomes), reporting (disseminating the study findings to relevant stakeholders), and monitoring/evaluation (monitoring the implementation of policy recommendations derived from the study). See the Figure 2 below. The South Los Angeles Fast Food Health Impact Assessment was designed to help inform land use policies in the community plan updates for South LA and other vulnerable communities.

**Figure 2: The Five Stages of Health Impact Assessment**

- 1) **Screening:** assessing the feasibility, timeliness, and value of an HIA to a policy's decision-making process
- 2) **Scoping:** establishing a research plan that includes: determining the geographic boundaries of study, determining research questions, choosing a methodology and solidifying participant roles for the HIA
- 3) **Assessment:** creating a baseline assessment profile, evaluating the magnitude of impact of the analyzed policy, and developing recommendations based upon study findings
- 4) **Reporting:** developing a communication plan to educate decision-makers and impacted stakeholders on opportunities to integrate the findings of the analysis into the decision making process
- 5) **Monitoring/Evaluation:** establishing a plan to track the progress of advocacy efforts, and to facilitate the implementation of the recommendations into the policy framework

## Steering Committee

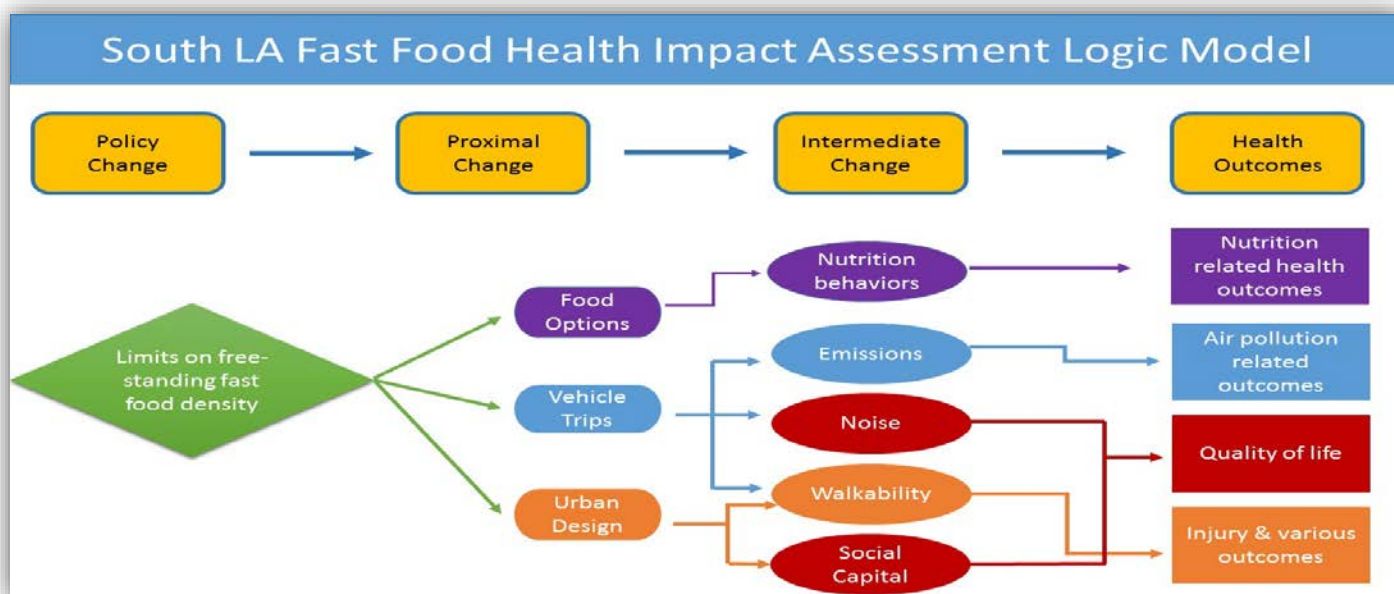
CHC convened a multi-sectorial steering committee from March, 2011 to February, 2012 that included the Los Angeles County Department of Public Health, the Los Angeles City Planning Department, several food access interested community-based organizations with diverse missions, and the support of faculty and staff from both the University of Southern California and University of California at Los Angeles. The committee led the process and designed the research methods and tools as well as analyzed the outcomes of the study.

The steering committee identified the following scoping questions:

1. What impact, if any, has the General Plan Amendment's regulation of fast food restaurant development had on the nutrition resource environment and health of South LA residents?
2. What impact, if any, would the potential revisions to the fast food regulations in the updated Community Plans have on the nutrition resource environment and health of South LA residents?

The research was guided by a quasi-experimental design that analyzed the South LA food resource environment, health behaviors, and health outcomes before and after the adoption of the fast food moratorium and the general plan amendment. Findings were used to project the impact of proposed changes to South LA's existing fast food density policies on health-related indicators in the community. This comparison incorporated both primary and secondary data through the tools detailed below.

## Logic Model



**Figure 3**

A logic model (Figure 3) was developed to convey the potential impact of the proposed policy and serve as a guide for research and analysis. The projected impacts were identified as outputs in the form of proximal changes, intermediate changes, and health outcome changes. Given the limited amount of empirical data and research on the sociological implications, this study focuses on the changes and outcomes associated with land use design elements: food options and auto-centric design.

## Screening and Scoping

Screening is done to determine whether an HIA is warranted. The screening process is used to determine the value, feasibility, capacity, and potential influence of conducting a full assessment. Scoping is conducted

to identify which health impacts to assess and is heavily reliant on stakeholder input. CHC convened a steering committee to guide the screening and scoping stages of the HIA.

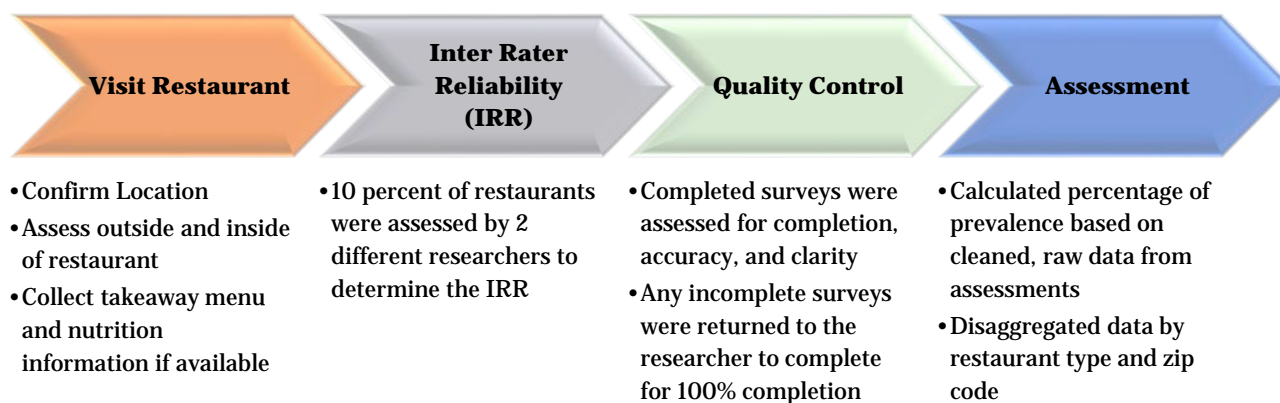
## Screening

### Primary Data Collection

**Fast Food Restaurant Checklist:** Primary data was collected through a fast food restaurant checklist to analyze the quantity of fast food restaurants in South LA and the healthfulness of food served. South LA residents were trained to survey all the fast food restaurants within South LA’s 90008 and 90011 zip codes, and evaluated 10% of the restaurants twice for inter-rater reliability (see Figure 4). The checklist combined questions from the Nutrition Environment Measures Study in Restaurants (NEMS-R) and the Restaurant Assessment tool developed by CHC through a Racial and Ethnic Approaches to Community Health (REACH) 2010 grant received from the Centers for Disease Control and Prevention. Questions were selected to determine the level of access to healthful food options in South Los Angeles’ fast food restaurant landscape. The questions were vetted through CHC’s coalitions and pre-tested for clarity and usability.

### Secondary Data Collection

**Figure 4: Overview of Restaurant Assessment Process**



Secondary data was collected and analyzed to determine changes in the food resource environment, environmental health conditions, and health behaviors and outcomes. Data from sources such as the LA County Key Indicators of Health Survey, the California Health Interview Survey (CHIS), the California Department of Education Fitness Gram Survey, and US Census 2010 were included.

**Modified Food Retail Environmental Index:** The study utilized the Modified Food Retail Environment Index (mRFEI) to calculate the ratio of healthy food retail outlets to all food retail outlets (healthy and less-healthy food). Healthy food outlets include full-service grocery stores, supermarkets, and

super centers. Less healthy outlets include fast food, convenience stores, and liquor stores. The ratios were calculated for LA County and for zip codes encompassing South LA and West LA utilizing the North American Industry Classification Codes (NAICs) at the zip code level from the US Economic Census.

## Scoping

### Focus Groups

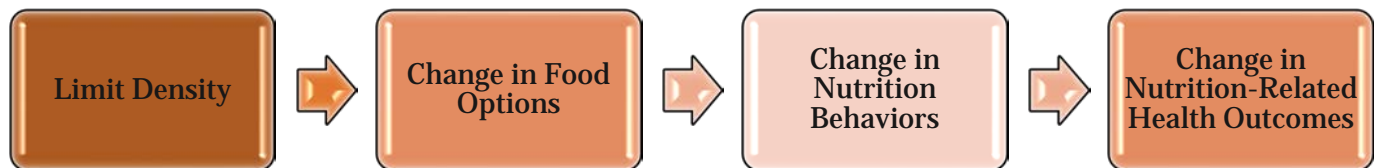
Focus groups were conducted to learn community perceptions of the existing food retail environment in South LA. The focus groups also provided information about fast food consumption and factors influencing behaviors among the participants and their children. Ten focus groups, with an average of 9-10 participants each, were held with parents and grandparents of middle and high school youth. Participants ranged in age from 19 to 65+. Over 80% were female; 49% Hispanic, 37% African American, and 14% Asian, White, or other. All participants lived within a five-mile radius of South LA's 90008 or 90011 zip codes. These zip codes were chosen to correlate with the additional primary data collected in these geographic areas through the fast food checklist.

## Assessment

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To understand the effect a current and proposed policy has on the South Los Angeles (SLA) nutrition environment, this next section assesses the food landscape examining trends before and following the moratorium. Comparisons are made with both West Los Angeles, a SLA adjacent community with different demographics, and Los Angeles County as a whole.

### Nutrition-Related Impacts of Current and Proposed Policy



### Impact on South LA's Food Resource Environment: Food Options Pre- and Post-Moratorium

This study compared fast food restaurant development trends for the four years prior to the fast food moratorium (2003-2007) with the four years following the moratorium (2007-2011) to assess the impact of the policy on 1) food options within the community and 2) health-related indicators in South LA.<sup>b</sup> Since the moratorium was established to preserve South LA's limited land for the development of healthier alternatives, this analysis also investigates grocery store development before and after the policy. The data examination was extended to 2013 to allow the general plan amendment that replaced the moratorium in

<sup>b</sup> South Los Angeles is defined by zip codes: 90001, 90002, 90003, 90007, 90008, 90011, 90016, 90018, 90037, 90043, 90044, 90047, 90059, 90061, 90062.



2010, to take effect. The indicators on South LA’s food resource environment were compared to the contrast areas of West LA,<sup>c</sup> one of the most affluent areas in Los Angeles with a demographic composition that is 65.4% White,<sup>17</sup> and LA County.

**Density of Fast Food Restaurants Pre- and Post-Moratorium:** The study utilized US Economic Census data on fast food restaurants defined by North American Industry Classification (NAICS) code 722211 to analyze development trends in South Los Angeles prior to the moratorium.<sup>18</sup> NAICS code 722211 included all fast food restaurants (stand-alone and non-stand-alone) in each area and registered restaurant closings and openings in each calendar year (Figure 5).

**Figure 5. Fast Food Growth Rates from 2003 – 2013**

Year	SLA Total	LA County Total	SLA Net Change	LA County Net Change
2004	308	6717	9.6%	1.5%
2005	303	6845	-1.6%	-1.9%
2006	309	6896	2.0%	0.7%
2007	309	7175	0.0%	4.0%
2008	309	7165	0.0%	-0.1%
2009	324	7118	4.9%	-0.7%
2010	322	7096	-0.6%	-0.3%
2011	334	7211	3.7%	1.6%
2012	353	7641	5.7%	6.0%
2013	371	7678	5.1%	0.5%

Other data on development trends shows that from 2010 to 2012 the portion of building permits granted for new fast food restaurants in South LA declined at rates significantly greater than the overall county trend. Los Angeles County Environmental Health Division data reveal that in 2010, 5.96% of all permits issued for fast food restaurant development in LA County came from South LA. In 2011, this declined to 4.49% and in 2012 dropped to 2.44%.<sup>19</sup>

The fast food moratorium touched nearly all commercially zoned corridors in South LA.<sup>20</sup> If a restaurateur wanted to develop a stand-alone restaurant in non-exempt areas of the planning area, he/she needed a conditional-use permit from the City Planning Commission or Zoning Administrator.<sup>21</sup> No stand-alone fast food restaurants were exempted from the moratorium since it was enacted, and only one was exempted from the Crenshaw Specific Plan.<sup>22</sup> A Kentucky Fried Chicken was granted an exemption from the Specific Plan for design and signage purposes. The Zoning Administrator and Planning Commission have not

<sup>c</sup> West Los Angeles is defined by zip codes: 90024, 90025, 90232, 90034, 90263, 90035, 90265, 90045, 90272, 90049, 90291, 90056, 90212, 90292, 90064, 90293, 90066, 90401, 90067, 90402, 90077, 90403, 90210, 90404, 90211, 90405.

approved any exemptions from the half-mile density standards since the General Plan Footnote was established in 2010.<sup>23</sup>

**Availability of Grocery Stores Pre- and Post-Moratorium:** According to the City Planning Department, the dominance of fast food restaurants in South LA likely had “the effect of reducing opportunities for new grocery stores and full service restaurants in a *dense, urbanized neighborhood where land is limited.*”<sup>24</sup> Therefore, US Economic Census data were also collected for grocery stores with 10 or more employees as defined by NAICS code 445110. The data indicated that South LA had 54 full-service grocery stores in 2007. The average growth rate in full-service grocery stores in South LA per year between 2003 and 2007 was -0.5% per year. In LA County, the average growth rate in full-service grocery stores was -0.7% per year during the same period (see Figure 6).<sup>25</sup>

**Figure 6: Fast Food and Grocery Store Density Pre- and Post-Moratorium**

Geographic Area	Restaurants per 10,000 people (2007)	Restaurants per 10,000 people (2013)	Grocery per 10,000 people (2007)	Grocery per 10,000 people (2013)
South LA	3.97	4.72	0.68	0.87
West LA	9.37	10.42	1.61	1.34
LA County Avg.	7.26	7.76	1.08	1.09

US Economic Census data indicate that South LA had 68 full-service grocery stores in 2013 and that its annual growth rate in full-service grocery stores averaged 4.3% from 2007 to 2013. This growth rate was 4.8% greater than the average growth in grocery stores from 2003 to 2007. Similarly, LA County had an average growth rate of 0.2% per year in full service grocery stores between 2007 and 2013, which was only slightly higher than the -0.7% average growth rate in the four previous years (see Figure 6).<sup>26</sup>

Discussions with grocery store owners and operators revealed that although South LA’s limited space for development was a significant barrier to healthy food retail development, other barriers included the City’s unpredictable permitting process, taxes specific to the City of LA, and barriers unrelated to land use policy.<sup>27</sup> Based on this feedback, the fast food moratorium’s goal of preserving South LA’s limited land for the development of healthier alternatives addressed only one component of the many obstacles to grocery store development in South LA.

**Modified Retail Food Environment Index (MREFI) Pre- and Post-Moratorium:** South LA’s ratio of healthy food retail establishments to total food retail establishments, calculated using the mRFEI, indicates that in 2007 South LA’s mRFEI was 8.13. South LA’s average mRFEI was 8.05 from 2004 to 2007. These index scores were smaller than LA County’s mRFEI of 8.7 in 2007 and average mRFEI of 9.14 between 2004 and 2007. The national average for mRFEI is 10.<sup>28</sup> Based on this data, South LA’s ratio



of healthy food resources to total food resources from 2004 to 2007 was 11.93% less than LA County's and 19.5% less than the national average.

The mRFEI for South LA in 2011 was 8.0, with an average mRFEI of about 7.8 from 2008 to 2011. This average mRFEI was about 0.2 less than the average mRFEI prior to the moratorium. In LA County, the mRFEI was 8.6 in 2011 with an average of 8.74 from 2008-2011. This average is about 0.4 less than the average mRFEI prior to the moratorium. Therefore, South LA's average mRFEI from 2008 to 2011 was 10.76% less than LA County's, a slight improvement from the 11.9% difference in mRFEI prior to the moratorium.

## Discussion: Food Resource Environment

Although the data indicate that prior to the moratorium, South LA residents had fewer fast food restaurants and full-service grocery stores per 10,000 people than both West LA and LA County, this lower ratio of food resource outlets per population may be partially attributed to the high population density and relatively small geographic space available for development. South LA had 13,948 people per square mile or almost 5 times the rest of LA County (2,372 people per square mile) in 2007.<sup>29</sup> Consequently, although South LA had fewer fast food restaurants per population in 2007 compared to LA County, ***South LA's substantially smaller geographic area and higher population density led to a density of fast food restaurants per square mile of 5.97 in South LA compared to 1.8 restaurants per square mile in LA County in 2007.***<sup>d</sup>

Additionally, in South LA, fast food encompassed a substantially larger portion of the community's food resource environment than in the comparison areas, with 3.12 fast food restaurants for every sit down restaurant in South LA, compared to only 0.68 in West LA and barely one in LA County (see Figure 7). The fast food moratorium limited the development of new stand-alone fast food restaurants, but did not apply to existing fast food restaurants or to "in-line" fast food restaurants that were developed as part of mixed-use or multi-tenant structures. Although only one new stand-alone fast food restaurant developed in a regulated portion of South LA, fast food restaurant development continued after the moratorium likely due to an increase in multi-tenant establishments.<sup>30</sup> Although menu differences between stand-alone and in-line fast food restaurant are speculative and a subject for further research, channeling the growth of fast food restaurants toward less auto-centric and more pedestrian-friendly development models benefits South LA by minimizing emissions and promoting walkability.

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<sup>d</sup> Not including park land or water

Despite the recession's profound economic impact on South LA, full-service grocery store development grew at a faster rate after the moratorium than before. From 2007 to 2013, South LA experienced an increase in the average growth rate of full-service grocery stores to 4.3%, 4.8% greater than the four years prior to the moratorium. This growth rate was also notably larger than the LA County average of 0.9%. Despite this growth the population increase in South LA in the same period led to a relatively modest ratio of grocery stores per 10,000 people before and after the moratorium (see Figure 7).

As a result, the ratio of healthy food resources in South LA or mRFEI did not improve after the adoption of the fast food moratorium. However, the mRFEI score decreased by only 2.5% in South LA after the moratorium compared to a 4.4% decrease LA countywide (see Figure 7). This finding suggests that although the moratorium may not have directly led to an improved food resource environment short-term in South LA, it may have reduced the further degradation of the food resource environment.

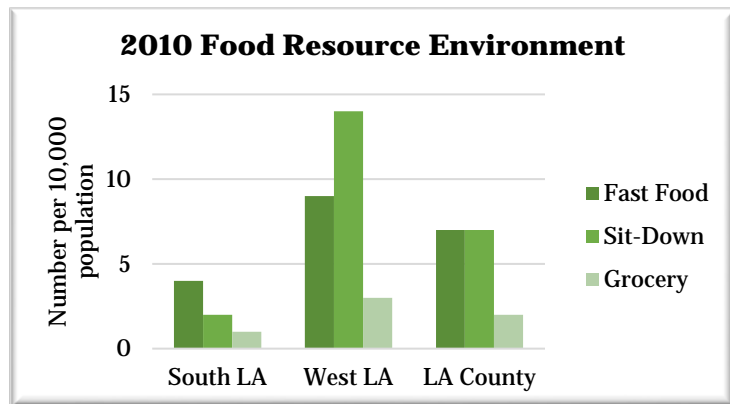
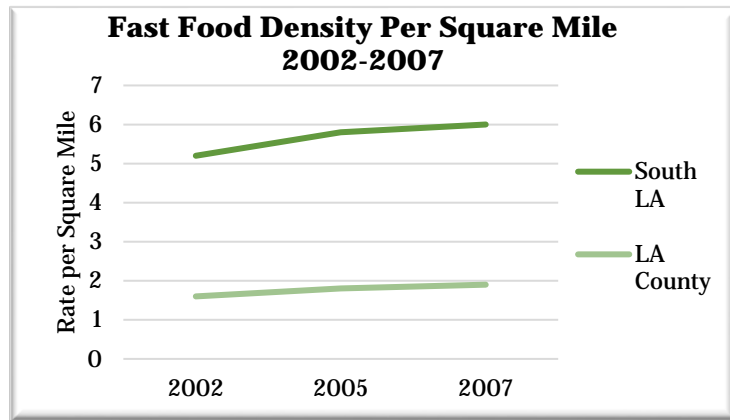
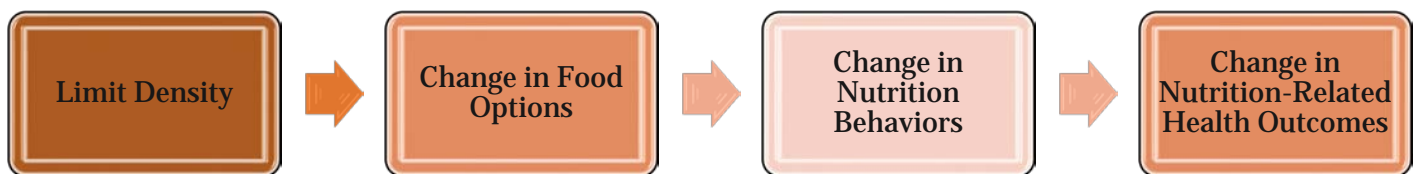


Figure 7

## Food Resource Environment Impact on Nutrition Behaviors and Outcomes



Proximity to fast food restaurants can impact nutrition behaviors and nutrition-related health outcomes in the short and long term. Although early in the policy process, this section investigates whether there are any indications of projected change in behaviors and health outcomes in South LA after the fast food moratorium. Our comparison utilized Los Angeles County Department of Public Health (LADPH) key health indicators for South LA, West LA, and LA County. LADPH health data were not collected annually, and questions were changed across data years. As a result, health data prior to the moratorium were only comprehensively available for 2007, and data after the moratorium were only available for 2011. LADPH

also changed its methods for collecting health survey data between 2007 and 2011. While data collected in the 2007 survey utilized a landline telephone survey, 2011 data surveyed participants through landlines and mobile phones. These inconsistencies mean that data from the health surveys in 2007 and 2011 cannot be directly compared.

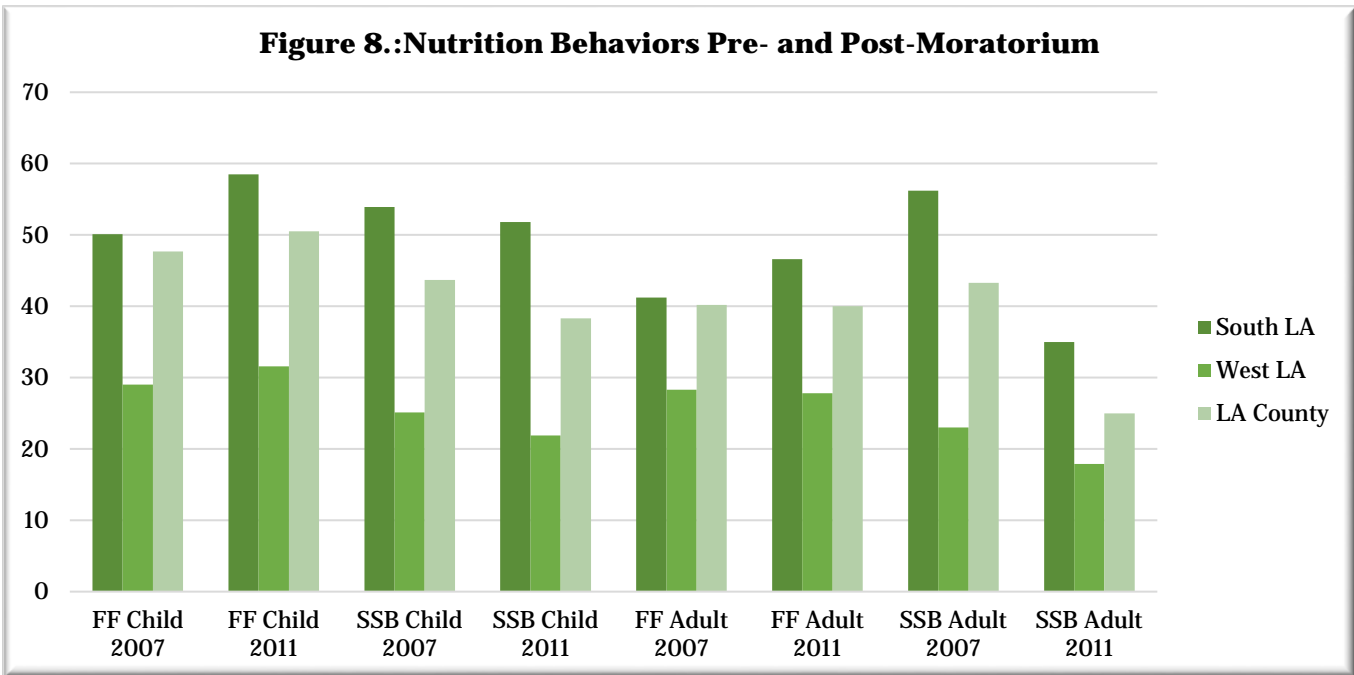
***Pre-Moratorium Nutrition Behaviors:*** In 2007, 50.1% of South LA children ages 0-17 consumed fast food at least once a week compared to 47.7% in LA County and 29% in West LA. In the same year, 41.2% of adults in South LA consumed fast food at least once a week while 40.2% of LA County adults and 28.3% of West LA adults consumed fast food at least once a week.<sup>31</sup>

Public health research finds that fast food consumption is closely associated with sugar-sweetened beverage (SSB) consumption. One 2009 study asserts that consumption of fast food at least 1-2 days a week increases sugar-sweetened beverage (SSB) consumption by 1.25 times.<sup>32</sup> Recent research has identified SSBs as the number one contributor to added caloric intake in the United States.<sup>33</sup> In South LA, 53.9% of children consumed at least one soda or sweetened beverage a day in 2007. This was the highest SSB consumption rate among children in LA County. During the same year, West LA's SSB consumption rate was 25.1% and the LA County average was 43.7%. Similarly, 56.2% of South LA adults consumed SSBs at least once a day compared to 43.3% and 23% in LA County and West LA respectively.<sup>34</sup>

Additional research suggests that fruit and vegetable consumption is associated with grocery store development and proximity.<sup>35</sup> In 2007, adult consumption of 5 or more fruits and vegetables a day in South LA was the lowest in LA County at 12.7%, highest in West LA at 22.7% and 15.1% LA countywide.<sup>36</sup>

***Post-Moratorium Nutrition Behaviors:*** 2011 LADPH data revealed that following the moratorium, 58.5% of South LA youth ages 2 to 17 consumed fast food at least once a week compared to 31.6% in West LA and 50.5% in LA County. Fast food consumption at least once per week was 46.6% among South LA adults, 27.8% for West LA adults, and 40% for all LA County adults. Sweetened beverage consumption at least once a day was high among South LA youth at 51.8% compared to 21.9% in West LA and 38.3% in LA County. SSB consumption among adults was 35% in South LA, 17.9% in West LA and 25% countywide. Moreover, similar to pre-moratorium rates, fruit and vegetable consumption rates among adults in 2011 were 11.4% in South LA (lowest), 22.1% in West LA (highest), and 16.2% LA countywide.<sup>37</sup>

**Figure 8.:Nutrition Behaviors Pre- and Post-Moratorium**



**Pre-Moratorium Nutrition-Related Health Outcomes:** A number of nutrition-related chronic diseases such as heart disease, cancer, and diabetes have been associated with fast food consumption. A study published by the *American Journal of Clinical Nutrition* concluded that the high percentage of unhealthy fats and other non-nutritious substances contained in the processed foods typically served at fast food restaurants creates a greater risk for coronary heart disease than unprocessed foods.<sup>38</sup> Consumption of these unhealthy fats is also linked to weight gain, which can lead to obesity. Similarly, the 2010 American Dietary Guidelines report that communities with higher concentrations of fast food or quick-serve restaurants tend to have higher Body Mass Index (BMI is a measure commonly used to assess obesity).<sup>39</sup> These impacts on BMI are even greater in households where fast food is consumed more than once a week.

**Figure 9: 2007 Nutrition-Related Health Outcomes**

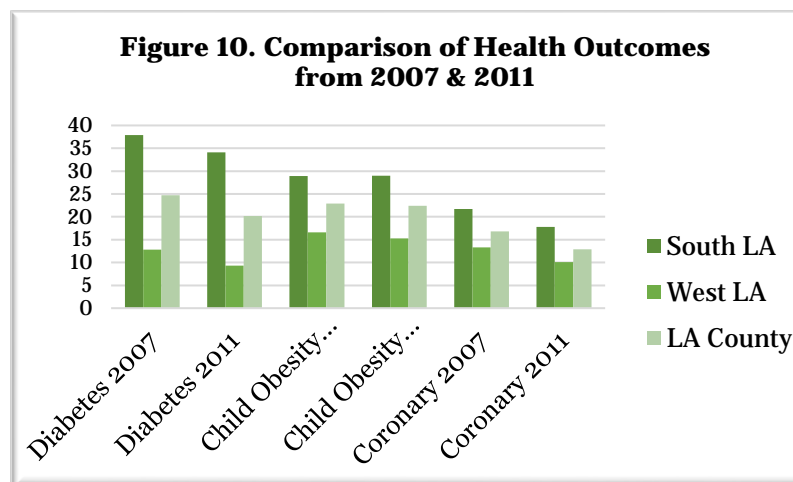
Nutrition-Related Chronic Diseases	SPA 6 (South LA)	SPA 5 (West LA)	LA County
Child obesity (Grades 5, 7, 9)	28.9%	16.6%	22.9%
Adult overweight & obesity	73.4%	42.8%	58.1%
Diabetes death rate per 100,000	37.9%	12.8%	24.7%
Coronary heart disease death rate	217.6%	132.6%	167.6%
Adults ever diagnosed with high blood pressure	31.4%	24.2%	27.6%
Adults with high blood cholesterol identified	28.3%	21.0%	24.2%
Percent of adults ever diagnosed with hypertension	29.0%	19.3%	24.7%

In 2007, South LA’s coronary heart disease rate of 217.6 deaths per 100,000 population was nearly twice as high as West LA’s rate of 132.6 deaths per 100,000 and nearly 20% higher than LA County’s 167.6 per 100,000. South Los Angeles suffered the highest rate of deaths by coronary heart disease in the County and had one of the highest rates of diabetes death rates at 37.9, versus 12.8 in West LA and 24.7 countywide (see Figure 9).<sup>40</sup>

A 2007 longitudinal study conducted by Purdue University found that individuals living in close proximity to fast food restaurants experienced an average increase in BMI of 0.15.<sup>41</sup> Findings also conveyed that the closer the individuals lived to fast food restaurants, the higher the BMI increases. The density of fast food restaurants per square mile in South LA is 5.97/sq. mile compared to LA County’s 1.8/sq. mile, and the corresponding health outcomes support the literature.<sup>e</sup> Obesity rates among children in grades 5, 7, and 9 were highest in South LA in 2007 at 28.9% compared to LA County and West LA at 22.9% and 16.6%. The same pattern exists for the adult population with the percent overweight/obese 15.3% higher than the countywide average.<sup>42</sup>

**Post-Moratorium Nutrition-Related Health Outcomes:** In 2011, the coronary heart disease death rate per 100,000 population was 178.2 in South LA, 101.2 in West LA, and 128.6 countywide. The coronary heart disease death rate for 2011 was collected utilizing a different methodology than in previous years so it cannot be compared longitudinally. However, the coronary heart disease death rate from 2007 to 2011 decreased by 18% in South LA, while decreasing by 23.7% in West LA and 23.3% countywide during the same period.

Diabetes death rates were collected utilizing the same methods as previous years. In 2011, diabetes death rates per 100,000 people were 34.1 in South LA, a 10% reduction from 2007. In West LA, the diabetes death rate was 9.3 in 2011, a 27.3% reduction from 2007. LA County had an 18.2% reduction in diabetes death rates in 2011 at 20.2 per 100,000.<sup>43</sup>



Similarly, childhood obesity rates compiled by LADPH were collected from school fitness gram data that also maintained consistent methods into 2011 and can thus be compared to previous years. This data reveals that 2011 obesity rates among children grades 5, 7, and 9 stayed relatively the same as 2007 obesity rates across each geographic area with South LA at 29%, West LA at 15.3% and LA County at 22.4%. Adult obesity

<sup>e</sup> Not including park land or water

rates were collected through the phone survey and cannot be compared to previous years. South LA's adult obesity rate in 2011 was at 32.7% while West LA and LA County were 9.8% and 23.6% respectively.<sup>44</sup>

## **Discussion: Nutrition Behaviors and Outcomes**

Existing land use regulations in South LA have prevented the growth of stand-alone fast food restaurants, minimizing environmental and pedestrian impacts and preserving land for the development of alternative food retailers. The slight decline in the overall growth rate of fast food restaurants in South LA, from the onset of the moratorium until 2011, could have reduced the growth rate of poor nutrition-related health behaviors and nutrition-related health outcomes.<sup>45</sup> However, South LA children and adults continue to have higher rates of fast food consumption than both West LA and LA County children and adults. In 2011, South LA continued to have higher obesity rates among children and adults, higher heart disease and diabetes death rates, higher sweetened beverage consumption rates, and lower fruit and vegetable consumption than the comparison areas.

A number of factors unrelated to the moratorium have contributed to these results. The economic recession hit South Los Angeles harder than any other part of LA County, with unemployment rates reaching as high as 50% in some areas.<sup>46</sup> The recession forced many traditional fast food restaurant competitors to change their menu offerings to diversify their customer base.<sup>47</sup> While many households scaled back during the recession by consuming food at home, other households, mainly middle income, began to turn to fast food as a cheaper alternative to sit-down restaurants.<sup>48</sup> The market share of large fast food chains like McDonald's grew during the recession, while smaller fast food chains like Burger King, Jack in the Box, and Carl's Jr. lost market.<sup>49</sup> To attract more customers, many smaller fast food national chains chose to increase their value menu offerings. By 2012, value menu offerings increased to 20% of all traditional fast food restaurants' sales.<sup>50</sup> Research from the American Heart Association indicates that heavily discounted, processed, unhealthy food options dominated these value menu offerings.<sup>51</sup>

A study on fast food prices and the health outcomes of teens revealed that the weights of teens in low- and middle-income households were more influenced by fast food prices than teens in upper-income households.<sup>52</sup> Given this, increases in value menu offerings may have had a higher impact on fast food consumption and nutrition-related health outcomes among youth in South LA than in the predominantly upper-income households in West LA. According to the same study, a \$1 increase in fast food prices decreased adolescent BMI by 0.646.<sup>53</sup>

Participants in our 2012 focus groups said they were more likely to purchase foods from the value menu than from the regular menu due to cheaper prices. Though some participants stated that they ate at home to save money, others indicated that when their families decided to go out to eat, the less healthy options were chosen because of their significantly lower prices. One parent explained that for her: "Price [was] the biggest factor. The healthier food costs more."



Our 2012 fast food restaurant checklist concluded that 40% of the restaurants in the 90008 and 90011 zip codes in South LA only advertised food on the outside of their establishments that was both unhealthy and discounted. The average price for items identified as unhealthy was more than 25% cheaper than healthier menu items. Furthermore, healthier menu items were consistently less likely to be found on the value menus compared to regular menus (see Figure 11).

**Figure 11: Fast Food Restaurant Checklist Findings**

Food Option	Regular Menu	Value Menu	Total
Smaller portion options	26.2%	6.2%	<b>32.3%</b>
Entrée salad	26.2%	0%	<b>26.5%</b>
Green side salad	16.9%	1.5%	<b>18.5%</b>
Vegetarian (non-salad) entrees	13.9%	0%	<b>13.9%</b>
Side of cooked vegetables	12.3%	0%	<b>12.3%</b>
Brown rice	9.2%	0%	<b>9.2%</b>
Fresh fruit	7.7%	0%	<b>7.7%</b>
Turkey burgers	6.2%	0%	<b>6.2%</b>
Soy or tofu dishes	6.2%	0%	<b>6.2%</b>

Additionally, full-service grocery stores do not exclusively sell healthy food options. A national study of over 5,000 retail outlets throughout the US shows that most supermarkets have an equal ratio of healthy to unhealthy food options.<sup>54</sup> In contrast, healthier staple food options such as fresh produce, low-fat dairy, and whole wheat bread were less likely to be found and more likely to be expired in South LA grocery stores than in West LA stores. In addition, a 2005 assessment indicated that South LA had a significantly higher ratio and density of convenience stores compared to West LA. This study also found that 95% of the stores surveyed were convenience stores or local markets.<sup>55</sup> These food outlets are less likely to offer fresh fruits, vegetables and other healthy food options. These disparities in the access and quality of healthy options can contribute to disparities in nutrition behaviors and are not addressed through the fast food moratorium.<sup>56</sup>

**Figure 12**



These and other factors may account for why, although rates in chronic health conditions are dropping, they are doing so more slowly in South LA than countywide. Longitudinal research is needed to adequately assess the long-term impact of fast food density restrictions and healthy food resource development efforts on health behaviors and outcomes following the moratorium. Proximity is just one factor in food choice. More research is needed to draw a conclusive causal relationship between fast food density, fast food proximity, and health outcomes.



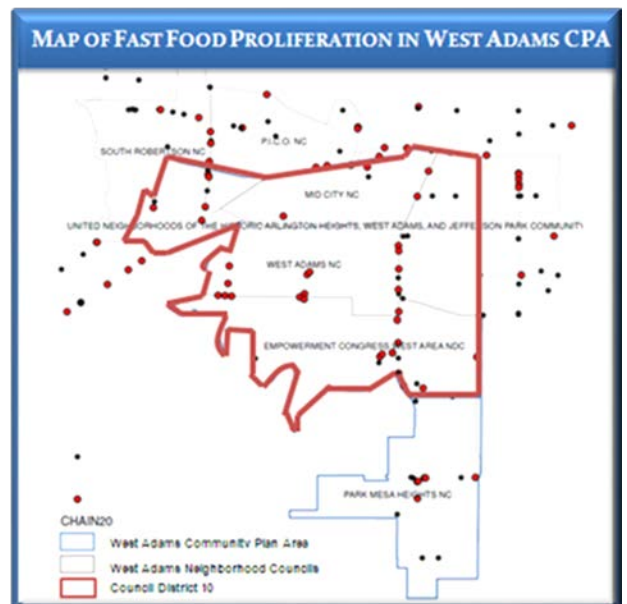
## Nutrition-Related Impacts of Proposed New Community Plan Policies

There are several ways that land use policy changes included in updated Community Plans could alter the fast food density limitations that are currently applicable in South LA. This section analyzes the potential impacts of these changes on nutrition-related indicators.

**Revised Density Limitation Standards:** One subtle yet potentially significant change is revised fast food density limitation standards. The current General Plan amendment restricts a new freestanding fast food restaurant from locating within a ½ mile of any existing fast food restaurant. A suggested change has been to prohibit new freestanding fast food restaurants within a ½-mile radius of existing stand-alone restaurants only, allowing new freestanding restaurants to be developed in close proximity to other non-freestanding fast food restaurants. A map of the ½-mile radii around existing freestanding restaurants in the West Adams plan shows that approximately 0.34 square miles of commercially-zoned land scattered throughout the area would now be vulnerable to the over-concentration of fast food restaurants (se Figure 13). While this increase might be minimal in West Adams, the change could have larger implications in corridors throughout the other South LA plan areas.

With research suggesting that the development of one new fast food restaurant could impact BMI by 0.15 points (0.9 pounds) and with approximately 10,949 people per ½ mile radius in the CD 10 area, overtime BMI could increase by an additional 0.15 points for over 16,423 residents.<sup>57</sup> This could have a cumulative impact especially when coupled with the continued increase of non-stand-alone fast food restaurant development in the area. The impact on BMI would be even greater for individuals without access to private transportation. An LA County study reveals that individuals without private transportation who live in high fast food density areas weighed about 0.45 BMI units (or 2 pounds) more than individuals in the same area who own cars.<sup>58</sup> In South LA, 10% of South LA residents do not have private transportation.<sup>59</sup>

Figure 13



**Transit Oriented Districts Limitations:** Another suggested change has been to incorporate fast food density limits applicable near Transit Oriented Districts (TOD) located on existing and proposed light-rail corridors. In CD 10, as an example, six TODs are located on commercial corridors. The limitations could restrict stand-alone fast food restaurants from locating only within a ¼ mile of an existing stand-alone restaurant, as opposed to the current limitation of ½-mile per the General Plan Amendment.

Light rail is rapidly gaining popularity throughout the country not only as a transportation alternative, but also as a catalyst for economic development.<sup>60</sup> Each light rail stop is a potential node for more dense development, greater investment, and increased patronage for nearby businesses. Historical trends indicate that fast food restaurants come with increased overall commercial retail development.<sup>61</sup> Light rail investments along transit lines may be catalysts for increases in fast food restaurant development. For this reason, although the limitations would relax the density standard in these designated TOD areas from ½ mile to ¼ mile, the fast food density standards will most likely have their greatest impact in the commercial corridors of the plan area.

***School Limitations:*** The West Adams Community Plan, adopted in June 2016, contains a restriction of new stand-alone fast food restaurants on the same street, across the street from, or adjacent to schools within designated commercial corridors and nodes. This policy will be enforced along with the ½ mile density regulations for new stand-alone fast food restaurants and would serve as additional protection against new fast food development in the region. The area impacted includes 21 schools along portions of Pico, Venice, Washington, Jefferson, Exposition, King, Vernon, Robertson and Slauson Boulevards.

There are no freestanding fast food restaurants on the immediate block of the 21 schools. Many of the schools are nestled next to residential development, some are already in regulated TOD areas, and others are on dense, built-out commercial blocks not currently conducive to stand-alone fast food restaurant development. Given this, it is unlikely that the policy will have a notable impact on future development near the existing schools. While the probability of a new freestanding restaurant within the immediate block of a school is low even without the policy, the policy is consistent with promoting commercial diversity and protecting these areas from future proliferation if the design typology around these schools changes.

## **Discussion: Nutrition-Related Impacts of Proposed New Community Plan Policies**

Suggested fast food limitations near TODs and schools would likely have some positive impacts on protecting potentially vulnerable areas from an over-concentration of fast food restaurant development. While there are currently no fast food restaurants on the streets where applicable schools are located, there has been an increase in new school construction within the last decade. This coupled with the continued opening of charter schools, which sometimes operate in non-school sites, underscore the importance of this standard. If the density standards in the Community Plan updates are successful in preserving land for the development of healthier alternatives like grocery stores and development models that promote walkability, positive impacts on health behaviors and health outcomes long-term in South LA could result.

In addition to the nutrition-related impacts discussed, the fast food moratorium and New Community Plan policies can also have impacts on environmental health related to vehicular trip generation and walkability. Grocery stores generate more vehicular trips than fast food restaurants, and vehicular trips generated as a

result of South LA’s retail leakage has a substantial impact on vehicle trips generated. Additionally, reducing the amount of car-centric food retail development can increase pedestrian safety as fewer cars are on the road. Many health conditions that disproportionately affect low-income and communities of color are associated with environmental factors, including air quality related illnesses, quality of life, and pedestrian injury. Each of these health outcomes is associated with auto-centric behaviors and can be mitigated with further reduced emphasis on auto-centric food retail development in South LA.

## Assessment Conclusions

**Figure 14**

Indicator/Outcome	Pre-Moratorium	Post-Moratorium	Positive/ Negative
<b>South LA</b>			
Avg. fast food growth rate/year	2.5%	5.5%	Negative
Avg. grocery store growth rate/year	-2.0%	4.3%	Largely Positive
Child fast food consumption once/week*	50.1%	58.5%	Negative
Child obesity grades 5, 7, 9	28.9%	29.0%	Neutral
<b>LA County**</b>			
Avg. fast food growth rate/year	2.1%	3.2%	Negative
Avg. grocery store growth rate/year	-0.7%	0.2%	Slightly Positive
Child fast food consumption once/week*	47.7%	50.5%	Negative
Child obesity grades 5, 7, 9	22.9%	22.4%	Neutral

Source: Los Angeles County Department of Public Health, Health Survey

\*Different methods were used to collect child nutrition behaviors before/after the moratorium and should be compared with caution

\*\*The moratorium only took place in South LA; LA County is included as a time comparison

The City Planning Department states that South Los Angeles’ current “overconcentration of Fast Food Establishments is found to be inconsistent with the respective Community Plans”<sup>62</sup> and that the Fast Food General Plan Amendment is consistent with the Commercial Objectives of the previous West Adams-Baldwin Hills-Leimert Park Community Plan. These objectives are to: “identify and address the overconcentration of those commercial uses which have resulted in the encouragement of activities that are detrimental to the health and welfare of the People of the Community.” Our findings indicate that the potential health outcomes of proposed New Community Plan are consistent with the existing land use policy goals of protecting the “health and welfare” of residents. Moreover, the Plan is largely consistent with the community’s desire to “enhance the character of retail by providing a better mix of neighborhood amenities including healthy food options.”<sup>63</sup>

Additional longitudinal data are needed to assess the moratorium’s impact on healthy food access and health outcomes in South LA. While the moratorium slowed the degradation of South LA’s food resource environment from 2007 to 2011, this study’s primary data reveal that healthy food options remain difficult to access even after the policy was adopted. More policy, systems, and environmental changes need to be

implemented with the moratorium along with other strategies to lead to improvements in nutrition-related health indicators. One possible solution is to provide an exemption from fast food density policies for restaurants that meet the 2010 American Dietary Guidelines (see Appendix A). A city policy that prioritizes city-owned surplus property for full-service grocery stores or other retail outlets selling healthy food is another possible solution.

## Reporting

### Policy Recommendations

The policy recommendations in this chapter challenge the City and County of Los Angeles to expand the paradigm and scope of health and general welfare further. This study calls on the local planning department to promote and establish policies that protect an expanded view of health, which includes the obesogenic-related health of the local population. These recommendations were heavily influenced by the following briefs: Community Health Councils’ *South Los Angeles Fast Food Restaurant Report* and the Centers for Disease Control and Prevention’s *Implementation and Measurement Guide* for healthy living policies in local communities.<sup>64</sup> The recommendations include:

Figure 15

Strategy	Recommendation	Responsibility Agency / Jurisdiction
Expand Current Terminology	Expand “Fast Food Restaurant” definition beyond stand-alone to incorporate all fast food restaurants	Los Angeles Planning Department Los Angeles City Council
Eliminate Geographic Exemptions	Remove any contingencies that allow specific areas within the community plan to be exempted from fast food density policies	Los Angeles Planning Department Los Angeles City Council
Provide Healthy Food Incentives	Allow “Healthy” Certified fast food restaurants to locate within all half mile boundaries	Los Angeles County Dept. of Public Health – Environmental Health Los Angeles Planning Department Los Angeles City Council Los Angeles County Board of Supervisors
Establish Buffer Zones Around Schools	Prohibit new fast food restaurants within a half mile of sensitive receptors, including schools	Los Angeles Planning Department Los Angeles City Council
Assess Health Impacts	Integrate Health Impact Assessments as components of Planning’s program and project review process	Los Angeles Planning Department Los Angeles City Council

This chapter analyzes policy recommendations that address potential loopholes in South LA’s fast food restaurant development regulations. These policy recommendations include both “carrot” and “stick” approaches to improving the food resource environment in an effort to support healthier options and



discourage the continued spread of unhealthier options. The recommendations were informed by findings from this study about the influences on fast food consumption and restaurant preference and demand in South LA.

## 1. Expand Fast Food Definitions & Forgo Geographic Exemptions

South LA's current land use policies have been successful in significantly limiting easy opportunity sites for new stand-alone fast food restaurants. However, many unhealthy fast food restaurants continue to locate in South LA because of loopholes that permit non-stand-alone restaurants to develop in shopping centers, strip malls, and other locations with multiple tenants.

The proposed Community Plan Implementation Overlay (CPIO) also contains a limited definition of fast food that includes:

“A single or multiple tenant free standing pad structure designed solely for restaurant use which dispenses prepared food over a counter or by way of drive-thru service for consumption on or off the premises.”

This definition has and will continue to impede the community's efforts to reduce the overconcentration of fast food and preserve land for healthier options.

Additionally, geographic exemptions from the policy threaten the progress that existing regulations have made in curbing the proliferation of stand-alone fast food restaurants. No statutory exemptions (Article 18, Sections 15260-15285) or Categorical Exemptions (Article 19, Sections 15300-15332) exist within CEQA to excuse the lead agency from studying potential impacts of geographic exemptions in South LA, should they be proposed. Furthermore, no reasons are provided in the Community Plan, Implementation Plan, Community Plan Implementation Overlay districts (CPIO), or administrative record to support exemptions. In fact, Ordinance No. 181412, the enabling ordinance for the establishment of “CPIO,” explicitly states that the Area Planning Commission may not permit an exemption from a CPIO regulation if the exemption is “... detrimental to the public welfare ... .”<sup>65</sup> To inform other governmental agencies and the public of the environmental impact of the proposed plan<sup>66</sup> and to demonstrate that the public is being protected,<sup>67</sup> City Planning must explain why an exemption would be valid with justifiable evidence, including an analysis contained within the Environmental Impact Report (EIR).

As a result, this study proposes the following:

- ***Expand fast food restaurant policies to include all fast food restaurants in South LA, not just stand-alone restaurants.***
- ***Forgo exemptions from the area's current and future fast food density standards.***

## 2. Incentivize Healthy Food

The Centers for Disease Control and Prevention encourage local municipalities to provide incentives for restaurants that meet healthier nutrition guidelines as a way to improve food resource environments in communities. The West Adams community plan does include a policy-level provision for the establishment of a healthy restaurant incentive program. This program includes supporting “efforts to study the implementation of a Healthy Fast Food Restaurant Incentive Program that will begin to address dietary standards for all fast food restaurants and exempt, from further regulation, those that comply with the provisions of the Program.” Similarly, the Plan for a Healthy Los Angeles contains an implementation proposal to operate a “Healthy Restaurant Incentive Program in concert with fast food density limitations”.

The Choose Health LA restaurant program is one measure that may be adaptable to land use incentive programs in South LA. Therefore, this study’s steering committee recommends that the City Planning Department and the County Department of Health Services implement the following:

- ***Exempt fast food restaurants with menus that meet “Healthy Restaurant Guidelines” from fast food density requirements.***

This exemption could address concerns about the possible unintended economic consequences of completely restricting the development of all new fast food restaurants. The Guidelines would be based on federal nutrition standards.<sup>68</sup>

## 3. Establish Buffer Zones around Schools

The Centers for Disease Control and Prevention also identify school-oriented nutritional health policies as powerful ways to improve a community’s resource environment. Schools are public service venues established to improve the quality of life for students and the larger community. Policies protecting the health of constituents in public venues such as schools should be a priority for policymakers and the larger community.

The Los Angeles Unified School District (LAUSD) recognizes that providing healthy foods within each of its schools is necessary to improve the mental and physical health of its students. Though LAUSD has revised its menu to include more healthy foods that meet federal nutrition guidelines, this progress could be undermined by the over-concentration of fast food restaurants immediately outside school walls. South Los Angeles has the highest percentage of students who walk to and from school in LA County. The targeted advertising of cheap, unhealthy foods at many fast food restaurants surrounding South LA schools bombards these students. California State Assemblymember Bill Monning recently stated, “At a time when childhood obesity is at epidemic levels, we must ensure that our school environments foster student wellness.” A buffer around schools to keep out unhealthy foods would assist this effort.

Although the CPIO's existing policies of limiting fast food restaurant development on the same street, across the street from, and immediately adjacent to schools is a pioneering and progressive start to this effort, a school's environment extends well beyond the proposed geographic area. School attendance data reveal that the schools impacted by the CPIO regulations attract students within a one-mile radius of the school. For these reasons, the steering committee recommended:

- ***Expand existing regulations to prohibit fast food restaurants in South LA from locating within a half mile of all schools in the region.***

This policy would impact both stand-alone and in-line fast food establishments. Like the existing CPIO policy, this recommendation would apply to elementary, middle, and high schools. Restrictions on fast food development near schools can also be complimented by the adoption of **Healthy Kids Zone (HKZ)** overlays as recommended in the CHC policy report. HKZ promotes a suite of nutrition and wellness policies, including support for healthy food retail incentives, corner market conversions, green carts and school produce markets, and advertising restrictions on unhealthy food. In addition to the adoption of HKZ overlays, current priorities in Council District 9 focus on economic development and improved life outcomes for youth, and Council Districts 8 and 10 have prioritized economic development. Finally, the Promise Zone designation in South LA, SLATE-Z<sup>f</sup> and the Building Healthy Communities South LA<sup>g</sup> are focused on improving the quality of lives and economic and health outcomes for South LA residents, especially youth. Taken together, these policy priorities and various funding streams will help support planning and land use policies for a healthier South LA.

## 4. Assess Health Impacts

Although South LA's Fast Food General Plan Amendment pioneered one of the first land use policies in the nation with a comprehensive view of health as justification, nutritional health was only one of six environmental elements that prompted the policy. Additional justifications include: "[poor] design, site planning, amenities, parking layout, drive-thrus, trash and minimal landscaping." Similarly, the West Adams Community Plan promotes improved nutritional health through its goal to "enhance the character of retail by providing a better mix of neighborhood amenities including healthy food options."

The City Planning Department seeks to "honor our heritage and shape our future by partnering with all Angelinos to transform Los Angeles into a collection of distinctive, healthy and sustainable neighborhoods."

<sup>69</sup> This study recommends that the department more effectively assess how its policies, programs and the built environment impact the health and safety of communities. Local departments should make a concerted

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<sup>f</sup> In the Spring of 2016, a [Promise Zone](#) designation was awarded for [part of South LA](#) with the mission of revitalizing South LA by moving residents to economic opportunity

<sup>g</sup> A project funded by the California Endowment as a 10 year bringing together a diverse group of stakeholders to support the development of safe and healthy communities



effort to become educated on the health implications of their work. City planners must deepen their knowledge and understanding of design and land use effects on population health.

For this reason, we recommend:

- ***Integrate Health Impact Assessments into the Department of City Planning’s program and project review process. Conducting an HIA should become part of the process used to grant permission for new development.***

## Monitoring and Evaluation

This section establishes a plan to mark progress in integrating the study’s recommendations into the policy framework. The process tracks the impact an HIA has on the policy landscape, developing tools to assess the policies’ implementation and their impact on the community’s health outcomes. A summary of the monitoring and evaluation plan developed by the study’s steering committee is below:

**Monitoring:** The community played an active role in developing and reviewing the West Adams Community Plan Update. More than 300 area residents attended the public hearing and Planning Commission hearing on the draft plan and CPIOs to see the successful adoption of the West Adams Community Plan Update. The next steps in the process focus on the South and Southeast LA Community Plan Updates, which are intended for adoption in 2017.

Figure 16



This process provides an opportunity for monitoring the review and adoption of the proposed policies and to advance the policy recommendations outlined in this study.

**Evaluation:** The City should commit to collecting and analyzing data to assess the impact of the final policies incorporated into all three South LA Community Plan Updates and CPIOs within five years of their

adoption. This should include the short-range goal of adopting the policy recommendations contained in this report for the West Adams CPIO, mid-range goal of integrating these recommendations in other South Los Angeles community plans, and the long-term goals of increasing healthy food options in the entire South Los Angeles community.

Short Term	Mid Range	Long Term
<ul style="list-style-type: none"> <li>• Establishment of Healthy Restaurant Incentive Program (HRIP)</li> <li>• Adoption of policy recommendations into West Adams CPIO</li> <li>• Tools: Policy monitoring</li> </ul>	<ul style="list-style-type: none"> <li>• Adoption of policy recommendations into South &amp; Southeast LA community plans</li> <li>• Tools: Policy advocacy &amp; monitoring</li> </ul>	<ul style="list-style-type: none"> <li>• Increase in healthy food options of existing fast food restaurants</li> <li>• Tools: Community Assessments</li> <li>• Implementation of policy recommendations in other communities</li> <li>• Tools: Policy monitoring</li> </ul>

## Short-Term: Policy Adoption

The short-term phase of the monitoring plan involved the incorporation of this study’s policy recommendations into the CPIO and additional land use policy documents for the West Adams Community Plan update. Findings from this study were incorporated into comments for the draft Environmental Impact Report on the West Adams Community plan and recommendations were included in the final West Adams Community Plan update.

## Mid-Range: Policy Expansion

The West Adams CPIO and New Community Plan set precedents for the South LA and Southeast LA Community Plans. The timeline for the adoption of the two additional South LA Community plans are scheduled for 2017. Once the policy recommendations of this study were largely incorporated into the West Adams New Community Plan, advocacy efforts were directed towards ensuring that these same recommendations are integrated into the South and Southeast plans as well. This more comprehensive policy adoption of the aforementioned recommendations expands the geographic scope of the policies resulting in close to 1 million additional South Los Angeles residents experiencing protections against the disproportionate proliferation of fast food outlets in the area.

## Long-Term: Policy Evaluation

Findings from this study’s focus group studies reveal that there is demand for restaurants serving healthier food options in the South LA community. The existing food resources available in South LA currently do not meet the demands of many of the community residents that desire healthier food alternatives. The

incentive-based and regulatory policies contained in this study's recommendations are intended to curb the over-concentration of unhealthy fast food restaurants in an effort to encourage the development of healthier restaurant and food retail alternatives. Although restaurants existing prior to the implementation of this study's policy recommendations would not be directly impacted by the regulations, an increase in the number of fast food restaurants selling healthier options may put pressure on existing fast food restaurants to expand the diversity of their menu options to accommodate the demand for healthier alternatives.

To assess the policy recommendations' effectiveness on improving the healthfulness of the South LA food resource environment, community assessments must be conducted to compare the number of fast food restaurants serving limited to no healthful options, the number of fast food restaurants meeting the Healthy Restaurant Incentive Program's menu guidelines, and the number of healthy food retail outlets prior to and 5 years after the implementation of this study's policy recommendations. This community assessment should also include compliance monitoring with the Healthy Restaurant Incentive Program to evaluate the number of restaurants that received the Healthy Restaurant exemption and continue to meet the standards of the program.

## Conclusion

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Although South LA's fast food regulations may have positively impacted the community, current and suggested policies still leave the area's most vulnerable populations susceptible to the negative health impacts associated with continued fast food restaurant development. Community Plan Implementation Overlay zones (CPIO) provide the City of Los Angeles with a relatively new planning tool to expand the policies in community plans. In addition, South Los Angeles is currently undergoing an investment resurgence. Public transit lines — rail and bus — are in various stages of planning or implementation; an enclosed retail mall was renovated; two significant sites along major commercial corridors are being rehabilitated. This increase in development activity represents an opportunity to attract healthier alternatives.

There is no "magic bullet" to improve the health of South Los Angeles residents. Fast food restaurants are only one segment of the comprehensive and complex food resource environment of South Los Angeles. Reducing unhealthy fast food restaurant proliferation in South LA must be a component of a broader strategy to promote healthy eating and reduce disparities in obesity and nutrition-related chronic diseases.

Many factors influence nutritional behaviors. Individual choice, social norms, food production and distribution systems also impact the dietary behaviors of individuals.<sup>70</sup> To provide truly sustainable improvements in nutritional behaviors, strategies must be developed to address these factors. Policies restricting unhealthy restaurant development must be coupled with other strategies to increase healthy food access, expand physical activity resources, and ensure more equitable quality in healthcare and patient care

throughout all Los Angeles communities. This comprehensive approach will have a more profound effect on improving health access and health outcomes.

Policies for healthy food access must include both incentives and regulations with a balance that appeals to the restaurant industry, leads to an increase in nutritious menu selections, and encourages nutritious choices. Education must be a component of this comprehensive approach. Planners need training in population health education to deepen their knowledge and understanding of urban planning and design effect on population health. Public policy plays a significant role in shaping the health of communities. Good public policy must be based on sound research and analysis. A Health Impact Assessment (HIA) is an important tool and should be a routine part of the planning process for any proposed project.

Research from the Medical Expenditure Panel reveals that overweight females have an average annual expenditure that exceeds normal weight females by \$800. Most disparities in annual expenditures can be attributed to mental health.<sup>71</sup> Other research indicates that obesity costs Los Angeles County over \$3.6 billion in healthcare expenditures and an additional \$2.3 billion in lost productivity in 2006 alone.<sup>72</sup> More local city and county departments must view nutrition-related health as within the purview of their responsibilities since poor health results in financial and social costs and can be prevented with comprehensive community planning practices. The expansive financial costs associated with obesity and nutrition-related chronic diseases extend well beyond the individual. Establishing policies like those proposed in the recommendations section of this report provide low-cost solutions that could result in significant savings to local taxpayers, municipalities, and businesses as a result of reduced healthcare costs.

Finally, the mixed findings of empirical studies on the impact of food resource proximity on health outcomes such as BMI show that more research is needed to accurately quantify this impact. However, despite the need for more evidence on these environmental influences, equitable access to resources conducive to health and longevity must be a priority for all decision-makers who are required to act in the best interests of the health, safety, and well-being of their constituents.

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# Appendix A: 2010 Dietary Guidelines for Americans

## 2010 DIETARY GUIDELINES FOR AMERICANS PRINCIPLES

Differences by grade level	<b>Age-level differences in food guide calorie levels for meal patterns, sodium suggestions by age</b>
Calories	Reduce empty calorie intake from solid fats and added sugars; USDA food pattern calorie limits for sedentary and moderately active children are: <ul style="list-style-type: none"> <li><input type="checkbox"/> Elementary school (ES) = 1,000 – 1,600; 10% = 100 – 160</li> <li><input type="checkbox"/> Middle school (MS) = 1,400 – 2,000; 10% = 140 – 200</li> <li><input type="checkbox"/> High school (HS) = 1,800 – 2,800; 10% = 180 – 280</li> </ul>
Sugar	Reduce intake of foods with added sugar; most people should get a maximum of 15% calories from added sugar
Saturated and trans fats	Trans fat: <0.5g per day Saturated fat: <10% calories per serving
Total fat	Eat less saturated fat, more healthy fats from seeds, nuts, and fish; removed 35% calories from fat from main 2005 DGA recommendations; however, still recommend overall reduction
Sodium	Reduce intake of foods with added sodium. Adequate intake for individuals: <ul style="list-style-type: none"> <li><input type="checkbox"/> Ages 9-50: 1,500mg/day; 10% is 150</li> <li><input type="checkbox"/> Ages 4-9: 1,200mg/day; 10% is 120</li> </ul>
Foods to encourage	Nutrients of concern for children (potassium, dietary fiber, calcium, and vitamin D) <ul style="list-style-type: none"> <li>• Eat more fruits, vegetables: a 2,000 calorie diet needs 4-5 servings of fruits and 4-5 servings of vegetables</li> <li>• Reduce intake of refined grains; &lt;50% whole grains</li> <li>• Increase intake of fat-free or low-fat milk and other dairy products</li> <li>• Eat a variety of protein such as seafood, lean meat, poultry; eggs, beans and peas, soy products, and unsalted nuts and seeds</li> <li>• Replace high-solid fat protein foods with foods lower in solid fats and calories and/or those that are sources of oils</li> <li>• Replace solid fats with oils</li> </ul>
<ul style="list-style-type: none"> <li>• Fruits and vegetables</li> <li>• Fiber and whole grains</li> <li>• Low-fat dairy</li> </ul>	

Source: U.S. Department of Agriculture and U.S. Department of Health and Human Services, **Dietary Guidelines for Americans, 2010, 7<sup>th</sup> ed.**

## Appendix B: Additional Data

### West Adams CPA School Fitness Data

The number of students in the 21 schools and their fitness gram data:

- Elementary (16)- Enrollment 8,919
- Middle School (2)- Enrollment 3,072
- High School (3)- Enrollment 7,810 Total enrollment: 19,801

Type	School Name	% Aerobic Capacity need improvement	% Body Composition needs improvement
Elementary	BIRDIELEE V. BRIGHT ELEMENTARY	49.6	9.2
Elementary	ANGELES MESA ELEMENTARY	69.2	15.4
Elementary	BALDWIN HILLS ELEMENTARY	38.8	14.6
Elementary	CARSON-GORE ACADEMY OF ENVIORNMENTAL STUDIES	35.1	14.9
Elementary	COLISEUM STREET ELEMENTARY	85.4	24.4
Elementary	FORTY-SECOND STREET ELEMENTARY	14.8	9.8
Elementary	SEVENTY-FOURTH STREET ELEMENTARY	17	9.8
Elementary	SIXTH AVENUE ELEMENTARY	13.2	6.6
Elementary	TOM BRADLEY GLOBAL AWARENESS MAGNET	47.2	15.3
Elementary	TWENTY-FOURTH STREET ELEMENTARY	14.6	13.5
Elementary	YES ACADEMY	57.7	13.5
Elementary	FIFTY-NINTH STREET ELEMENTARY	62.2	11.1
Elementary	HILLCREST DRIVE ELEMENTARY	24.8	12.1
Elementary	CIENEGA ELEMENTARY	34	9.7
Elementary	MARVIN ELEMENTARY	19.2	15.2
Elementary	VIRGINIA ROAD ELEMENTARY	55.7	14.3
Middle	AUDUBON MIDDLE	24.9	16.6
Middle	BARACK OBAMA GLOBAL PREPARATION ACADEMY	70.9	17.7
High	CRENSHAW SENIOR HIGH	38.8	17.8
High	WEST ADAMS PREP SENIOR HIGH	20.7	12.5
High	SUSAN MILLER DORSEY SENIOR HIGH	34.8	20.4

## Change in Environmental Health Fast Food Permits from 2010-12

Year	South LA EH Permits for Fast Food	% change in South LA FF permits per year	LA County EH Permits for Fast Food	% change in LA County FF permits per year
<b>Jan - Dec 2010</b>	9	-	151	-
<b>Jan - Dec 2011</b>	7	-22.20%	156	<b>2.60%</b>
<b>Jan - May 2012</b>	<b>2</b>	<b>-71.43%</b>	<b>82</b>	<b>-47.44%</b>

## Grocery stores with 10 or more employees in Target Area

Zip Code	Year			
	2003	2007	2011	2013
<b>90001</b>	7	6	7	7
<b>90002</b>	1	3	2	2
<b>90003</b>	5	5	7	7
<b>90007</b>	4	4	4	6
<b>90008</b>	1	1	1	2
<b>90011</b>	7	6	7	7
<b>90016</b>	7	7	9	9
<b>90018</b>	1	2	1	2
<b>90037</b>	4	4	5	6
<b>90043</b>	4	2	1	2
<b>90044</b>	6	7	7	7
<b>90047</b>	4	4	4	6
<b>90059</b>	3	2	3	3
<b>90061</b>	0	0	0	1
<b>90062</b>	1	1	1	1
<b>Total</b>	55	54	59	68
<b>LA County Total</b>	1098	1066	1070	1077
<b>SLA Rate (avg)</b>	-	-0.50%	2.30%	7.60%
<b>LA County Rate (avg)</b>	-	-0.70%	0.10%	0.30%

Source: U.S Economic Census County Business Patterns 2001-2011

## Appendix C: Data Limitations

**Walk Score** - Research from Walk Score, Inc. was utilized to analyze the built environment indicator of walkability. Walk Score uses a patent-pending system to measure the degree of pedestrian friendly design in a community. The Walk Score algorithm ranks the walkability of a location based on the distance, quantity, and infrastructure characteristics of amenities in the following nine categories: grocery stores, restaurants, shopping, coffee, banks, parks, schools, entertainment, and books. One limitation of Walk Score is the lack of data on the physical aesthetics and quality of walking infrastructure in the communities assessed. The quality of sidewalks and streets was not incorporated into the analysis, which could impact a community's Walk Score. In our study's impact analysis, the Walk Score data was combined with data from the study's field surveys to generate a more comprehensive portrait of the walkability around fast food restaurants.

**Vehicle Trip Estimates**- The vehicular trip calculation was based on a small sample size and the estimates should be used with caution.

**Air and Noise Quality Data**- Although data is available on air quality and noise pollution in the target areas, we needed data collected prior to 2007 to compare with data on the same geographic areas collected between 2008 and 2011. We had difficulties identifying this data and therefore could not incorporate it into the analysis.

**Additional Literature:** Some peer-reviewed studies have determined that there is no associational relationship between food resource environments and the health indicators highlighted throughout this report.<sup>a</sup> However, the overwhelming majority of evidence indicates that environmental factors such as availability, proximity, and transportation access to food retail outlets impact nutrition behaviors and related health outcomes.<sup>b</sup> Other research on food resource outlets shows that full-service grocery stores do not exclusively sell healthy food options. A national study of over 5,000 food retail outlets throughout the US indicates that most supermarkets have an equal proportion of healthy to unhealthy food options.<sup>c</sup> Based on this research, although an increase in full-service grocery store development may lead to an increase in the accessibility of healthy food choices, it may also lead to an increase in the accessibility of unhealthy food choices. These findings were not incorporated in this analysis.

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<sup>a</sup> Hattori A, An R, Sturm R. Neighborhood Food Outlets, Diet, and Obesity Among California Adults, 2007 and 2009. *Prev Chronic Dis* 2013;10:120123. DOI: <http://dx.doi.org/10.5888/pcd10.120123>.

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