

FOOD POLICY COUNCIL

LOS ANGELES FOOD SYSTEM SNAPSHOT 2013

A baseline report of the Los Angeles regional foodshed





ABOUT LAFPC

The Los Angeles Food Policy Council is a collective impact initiative working to make Good Food—food that is healthy, affordable, fair and sustainable—available to all Angelenos.

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ACKNOWLEDGMENTS

The Los Angeles Food Policy Council is fortunate to have access to a diverse group of food system leaders and thanks them for lending their time and expertise to review and contribute to this report.

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The Los Angeles Food Policy Council is grateful for the generous support from our funders: the California Wellness Foundation, JIB Fund Community Building Initiative, Kaiser Permanente Community Benefit Grants Program, The California Endowment, Citi Community Development and the Urban & Environmental Policy Institute. We would also like to thank Community Partners for their fiscal sponsorship and the City of Los Angeles for its generous support.

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EXECUTIVE SUMMARY

Los Angeles Food System Snapshot 2013

The Los Angeles Food System Snapshot presents an overall picture of the Los Angeles regional foodshed across nine food system topics areas: Regional Foodshed, Environmental Sustainability, Health, Retail Food Environment & Street Food, Food System Workers, Food Security, Urban Agriculture, Animal Welfare, and Food Waste. These topic areas were chosen to reflect the realities and potential of the Los Angeles foodshed. With data and statistics for over 100 indicators, this report covers a wide range of information related to our foodshed, Los Angeles County and the City of Los Angeles.

The Food System Snapshot serves as a resource for sharing knowledge about the health of the Los Angeles regional food system and will provide a baseline evaluation from which to track progress over time. It also reflects the collective impact of the hundreds of organizations, government agencies, businesses, universities and concerned residents who are working to build a healthy, sustainable and equitable regional food system for Los Angeles. The Los Angeles Food System Snapshot is the first step towards an assessment of the Los Angeles regional food system, laying the groundwork for the Los Angeles Food Policy Council's first Los Angeles Food System Progress Report in 2014.

REPORT FINDINGS

Regional Foodshed, Agriculture & Food System Economy

The Los Angeles regional foodshed covers the 10-county area within a 200-mile radius of the Los Angeles urban core. The 23,000 farms spread throughout the foodshed generated a total agricultural crop value of \$16.1 billion dollars in 2012 —a significant contribution to the state's economy. The food system also employed 1.3 million people across the food chain, accounting for one in every 7.5 jobs in the region. These jobs include farm work, food processing, distribution, food service and retail. However, the median hourly wage of non-supervisory food system workers in the LA foodshed was just \$10.20 per hour–well below a "living wage" of \$20.07 per hour for a household with two adults and one child.

More locally, Los Angeles County produced \$326 million dollars of fruits and vegetables in 2007 and was home to 1,734 commercial farms. And despite its great swaths of urbanized land, LA County contains 1,261 urban agricultural sites (such as community gardens, farms and nurseries) as of 2013. These sites provide access to fresh food for urban residents, and a variety of efforts are underway to transition even greater amounts of urban space into food-producing land.

Social & Community Impacts

The distributional inequities of our regional food system can have enormous impacts on the people and communities of Los Angeles. Hunger, obesity, poor health and lack of access to fresh, healthy food all go hand-in-hand, disproportionately impacting low-income communities and communities of color. In LA County, 42% of low-income adults are food insecure, and 61% of all adults are obese or overweight. In South Los Angeles 72% of restaurants are fast food establishments. Improving the unhealthy retail food environments often found in lowincome neighborhoods and "food deserts"—by increasing the affordability of and access to healthy food—can help transform a neighborhood's food options, making it easier for residents to "make the healthy choice the easy choice."

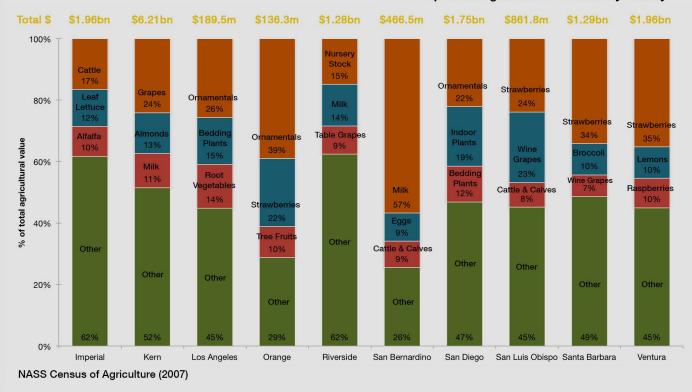
Environmental Impacts & Animal Welfare

Both food production methods and the types of food that people eat can have major implications for environmental and public health. Seven percent of all greenhouse gas emissions in California come from agriculture, which may include sources such as farm equipment and methane gas emissions from livestock. And in a region where dry weather is often the norm, only 0.3% of the agricultural water used in the LA foodshed came from natural rainfall—with irrigation being the primary source of applied agricultural water. On a national level, 40% of food is wasted in the United States, signifying a need to use food more efficiently, thus saving resources and easing the burden on municipal landfills.

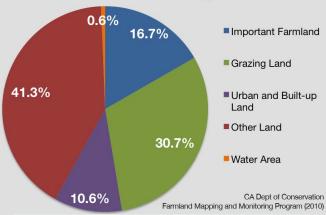
Identifying indicators to characterize animal welfare presents a challenge, as the most important data—the number of livestock per square acre—are not publicly available. Therefore the Animal Welfare section of the Food System Snapshot simply provides information on how many animals were on the average livestock farm in California in 2007—18,796 cattle, 1.4 million chickens, 11,921 hogs and more than half a million egg-producing hens.

Conclusion

The baseline findings of this Snapshot report reveal that our regional food system is just that—a complex set of activities and relationships related to every aspect of the food cycle— and underscore the need to aggregate and comprehensively analyze this data to help change makers respond to shifts in our local food system and target our efforts accordingly. The Los Angeles Food System Snapshot is the first step towards an annual assessment of the Los Angeles regional food system, and will provide a starting point from which to track the progress of our collective efforts to make it more equitable, healthy and sustainable.

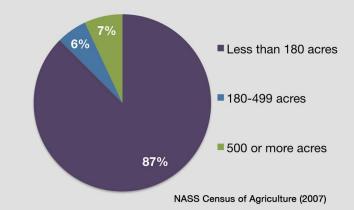


Top Three Agricultural Products by County



Land Type in LA Foodshed

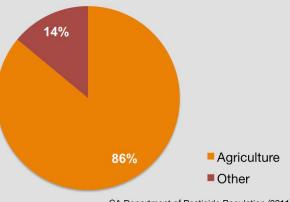
Farm sizes in LA foodshed



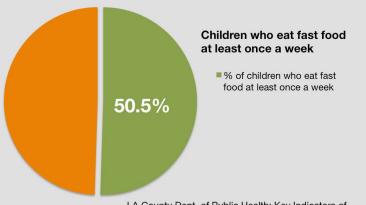


Average number of animals per farm in CA NASS Census of Agriculture (2007)

Pesticide usage in LA foodshed



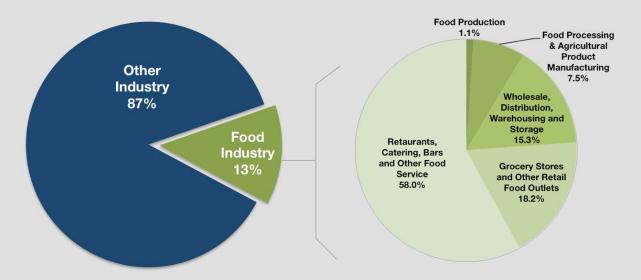
CA Department of Pesticide Regulation (2011)



57CITIES IN LA COUNTY PERMIT SIDEWALK FOOD VENDING. LOS ANGELES IS NOT ONE OF THEM.

LA County Dept. of Public Health: Key Indicators of Health by Service Planning Area (2011) Note: There are 88 cities in LA County Urban & Environmental Policy Institute (2012)

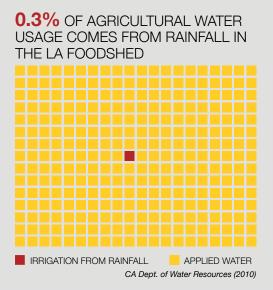
Food System Jobs as a Percentage of LA County Employment



U.S. Department of Labor, Bureau of Labor Statistics (2012)

THE FOOD SYSTEM ACCOUNTS FOR 1 IN 7.5 JOBS IN LA COUNTY





Adults who eat at least five servings of fruits & vegetables a day

 % of adults who eat at least five servings of fruits & vegetables a day

LA County Dept. of Public Health: Key Indicators of Health by Service Planning Area (2011)

1 MILLION LA COUNTY CHILDREN ARE ELIGIBLE FOR FREE OR REDUCED PRICE SCHOOL MEALS*



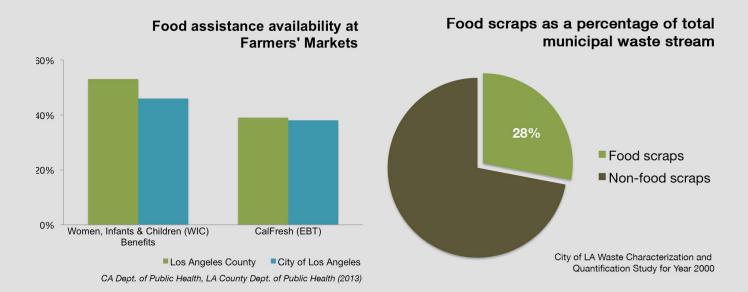
*California Department of Education (2012) **California Food Policy Advocates (2011)



16.2%

4 OUT OF 10 LOW-INCOME ADULTS IN LA COUNTY ARE FOOD INSECURE

UCLA Center for Health Policy Research (2011)





Each cell represents one out of 605 participating food organizations in the Los Angeles Food Policy Council network. Graphic by Alex Tarr



FOREWORD

BY ROBERT GOTTLIEB, PROFESSOR AND DIRECTOR OF THE URBAN & ENVIRONMENTAL POLICY INSTITUTE, OCCIDENTAL COLLEGE

The Los Angeles regional food system touches everyone who lives and works in the Los Angeles area and affects the region's economy, jobs, health, and environment. While the regional food system works remarkably well for many— Los Angeles hosts some of the finest restaurants and farmers' markets in the world— it also creates imbalances in environmental, economic, community and human health.

Since its formal establishment in September 2010, the Los Angeles Food Policy Council has become a valuable meeting place for collaboration between community food groups, food businesses, farmers, academics, researchers, and public officials, among others. Through the LAFPC Working Groups, leaders from over a hundred influential organizations across these many sectors coordinate their knowledge and best practices to develop policy and programmatic innovations, which add to the vibrant array of impactful food system initiatives already happening in LA. For example, the Working Group model of collective impact has enabled the development of a comprehensive food procurement policy that is representative of knowledge and input from five distinct sectors (nutrition, local food, fair wages and working conditions, animal welfare, and environmental sustainability), fostered increased collaboration among organizations working to transform small corner stores into healthy neighborhood markets, and advanced an initiative to address and support "street food" constituencies that include sidewalk vendors, food trucks, and their community supporters primarily in immigrant-based neighborhoods.

Although the LA Food Policy Council is just one of 200 food policy councils around the country, in its brief three year history, it has come to be recognized for its extensive reach and level of participation, and for its groundbreaking mix of grassroots activity and policy-initiated changes. We hope that the release of this Food System Snapshot will provide valuable information for everyone in the Los Angeles region and will add to the collective impact of the many wonderful organizations who are working to create meaningful food system change.

Read on to learn more!

INTRODUCTION TO THE 2013 FOOD SYSTEM SNAPSHOT

The Los Angeles Food System Snapshot provides a baseline evaluation of the state of the Los Angeles regional foodshed across nine broad food system topics. The Snapshot is designed to serve as a resource for sharing public knowledge that highlights the health of the food system and demonstrates the collective impact of hundreds of non-profit and community based organizations, government agencies, businesses, labor, universities and concerned residents that collaborate to build a sustainable and equitable regional food system for Los Angeles.

The Los Angeles Food System Snapshot is the first step towards an assessment of the Los Angeles regional food system, and provides a starting point from which to track progress over time. The Snapshot lays the groundwork for the Los Angeles Food Policy Council's first Los Angeles Food System Progress Report in 2014.

Report Purpose & Goals

"Having a small but comprehensive set of indicators establishes a common language that supports the action framework, measures progress along the common agenda, enables greater alignment among the goals of different organizations, encourages more collaborative problem-solving, and becomes the platform for an ongoing learning community that gradually increases the effectiveness of all participants. Mutually reinforcing activities become very clear once the work of many different organizations can be mapped out against the same set of indicators and outcomes."

> -- "Channeling Change: Making Collective Impact Work," Stanford Social Innovation Review, January 2012

The Los Angeles Food System Snapshot presents an overall picture of the regional foodshed based on existing facts and data. The report is organized into nine food system topic areas and includes over 100 indicators. The breadth of this information reflects the complexity of the food system as well as the programmatic reach of the Los Angeles Food Policy Council's partner organizations.

The purpose of the Food System Snapshot is to establish a set of baseline indicators and statistics that are fundamental to assessing the health of the LA regional food system. In the future, these indicators will allow us to measure and track changes in the equity, sustainability and connectivity of the food system over time. This initial baseline information was designed to lay the groundwork for future analysis of the regional foodshed, and does not at this time draw any specific conclusions or recommendations.

The Snapshot serves as a public tool for sharing important food system information, as well as fostering discussion among regional stakeholders about opportunities to enhance collaborative research, programs and policies. As a collective impact organization, the Los Angeles Food Policy Council is uniquely positioned to provide a publicly accessible and regularly updated resource for measuring food system change. The wide range of indicators featured in this Snapshot were drawn from extensive discussion with our network of food system leaders. The Snapshot serves as a public tool for sharing important food system information, as well as fostering discussion among regional stakeholders. This initial baseline information was designed to lay the groundwork for future analysis of the regional foodshed, and does not at this time draw any specific conclusions or recommendations.

Building on this report, LAFPC will continue to

convene its group of experts to release a Progress Report that will identify, evaluate and discuss trends and progress made in the food system. The Progress Report will review opportunities and challenges, highlight programmatic successes of the Los Angeles Food Policy Council Network, include recommendations for policy and research development, and offer a basis through which to compare the progress of the Los Angeles regional food system with other cities in the region, state and nation.

The information featured in this report is not meant to be exhaustive, but is a sampling of findings that will help inform the work of the Los Angeles Food Policy Council and its greater network. The mission of the Los Angeles Food Policy Council is to create a sustainable, economically vibrant and equitable regional food system for Los Angeles, and the statistics provided in the report reflect and add some perspective to that objective.

Food System Topic Areas

Regional Foodshed	Environmental Sustainability	Health
Retail Food Environment/ Street Food	Food System Workers	Food Security
Urban Agriculture	Animal Welfare	Food Waste

The Los Angeles Food System Snapshot is organized into nine topic areas, covering a unique set of food system issues. While many food system reports analyze the food chain by sector—starting with farming and production and ending with consumption and waste disposal—this document takes a different approach in order to support the efforts of the Los Angeles Food Policy Council and its greater network and bring attention to food system issues that have inspired the most activity in Los Angeles. This document synthesizes the data into alignment with the Los Angeles Food Policy Council framework developed through years of collaborative work with the LAFPC participating organizations. It includes policy bases derived from the Good Food for All Agenda action areas, the Good Food Purchasing Program value areas, LAFPC Working Group policy agendas, and LAFPC Leadership Board areas of expertise.



WHAT IS A GOOD FOOD SYSTEM?

What is Good Food?

HEALTHY

- Meets the USDA Dietary Guidelines for Americans.
- Is delicious, safe, and aesthetically pleasing.

AFFORDABLE

• People of all income levels are able to purchase.

FAIR

- All participants in the food supply chain receive fair compensation and fair treatment, free from exploitation.
- High quality food is equitably, physically, and culturally accessible to all.

SUSTAINABLE

• Produced, processed, distributed and recycled locally using the principles of environmental stewardship (including best practices in water, soil, and pesticide management).

What is a Good Food System?

A healthy, sustainable and equitable regional food system is a complex set of activities and relationships related to every aspect of the food cycle — including farming, production, processing, distribution, retail, preparation, consumption, and disposal.

A GOOD FOOD SYSTEM:

- Prioritizes the health and well being of our residents.
- Makes healthy, high quality food affordable.
- Contributes to a thriving economy where all participants in the food supply chain receive fair compensation and fair treatment.
- Protects and strengthens our biodiversity and natural resources throughout the region.
- Ensures that good food is accessible to all.

DEFINING THE LOS ANGELES REGIONAL FOODSHED

LOS ANGELES REGIONAL FOODSHED

The Los Angeles regional foodshed (or the LA foodshed) spans a 200-mile, ten county radius from the Los Angeles urban core. These counties include:



The Los Angeles regional food system (or foodshed) spans a 200-miles radius from the Los Angeles urban core. It includes ten counties and touches over 22 million people, or about 7% of the U.S. population. The ten counties included in this foodshed are Imperial, Kern, Los Angeles, Orange, Riverside, San Luis Obispo, Santa Barbara, San Bernardino, San Diego, and Ventura.

A foodshed is an area of land linked by a common local food source. The word originates from the concept of a watershed. Just as a watershed describes an area of land bounded by a common water source, a foodshed describes a geographic area bounded by its capacity to produce food for its occupants. A foodshed's size is determined by its "structures of supply," the regional, economic, political and transportation systems that determine how food gets from farm to table. This concept continues to evolve as structures of supply and systems of food production change over time.¹

¹ Los Angeles Urban Rural Roundtable, 2010.

OVERVIEW OF FOOD SYSTEMS CHALLENGES IN LOS ANGELES

The Los Angeles regional food system touches everyone who lives and works in the Los Angeles area and affects the region's economy, jobs, health, and environment. While the regional food system works remarkably well for many—Los Angeles hosts some of the finest restaurants and farmers' markets in the world—it also creates imbalances in environmental, economic, community and human health. This section introduces a range of challenges threatening the sustainability of the Los Angeles regional food system.

Environment, Public Health & Animal Welfare

Conventional industrial farming methods, along with the practice of transporting food products over long distances, have been shown to cause severe ecological harm to the environment and climate, depleting non-renewable resources (e.g., soil, energy, biological diversity) and widening social inequities. Common issues include: the use of toxic pesticides and fertilizers, water pollution due to agricultural runoff, the amount of water used for irrigation, habitat destruction, methane gas emissions from industrial feedlots, landfills overburdened with food waste, and air pollution caused by transporting food over long distances. The conditions in which farm animals are raised are also a growing concern for the environment.

Both food production methods and the quality of food that people eat can have major implications for public health. Industrial farming methods expose farm workers, farmers, residents in agricultural communities, and consumers to pesticides and other agricultural chemicals. Many factory farms routinely use subtherapeutic antibiotics on their livestock, contributing to the growth of antibiotic-resistant bacteria, which can then transmit to human hosts. In fact, over 80% of all antibiotic use in the United States is on livestock.¹

To illustrate the scope and scale of our food system's impacts on the environment, animals, and our communities, here are a few statistics:

- Agriculture is responsible for 80% of all water use in California.²
- Pollution from agricultural fertilizers and animal waste is the biggest source of groundwater contamination in California, leaving many small communities in agricultural counties without a safe drinking water supply.³
- The UN Food and Agriculture Organization reports that the livestock industry accounts for 14.5% of the world's greenhouse gas emissions.⁴
- The average number of broilers (chickens) per farm in California was 1,416,818 in 2007.⁵

¹ Food and Drug Administration. (2011). FDA Annual Report on Antimicrobials Sold or Distributed for Food-Producing Animals in 2011. Retrieved from http://www.fda.gov/AnimalVeterinary/NewsEvents/CVMUpdates/ucm338178.htm

² UN Food and Agriculture Organization. (2013). Tackling climate change through livestock. Retrieved from http://www.fao.org/ag/againfo/resources/ en/publications/tackling_climate_change/index.htm

³ Center for Watershed Sciences at University of California, Davis. (2012). Assessing nitrate in California's drinking water: Report for the State Water Resources Control Board report to the legislature. Retrieved from http://groundwaternitrate.ucdavis.edu/files/138956.pdf

⁴ Goodland, R., & Anhang, J. (2009). Livestock and Climate Change. In State of the World 2011: Innovations that Nourish the Planet. Retrieved from http://www.worldwatch.org/sow11

⁵ NASS Census of Agriculture, 2007.

Food Security & Obesity

Hunger continues to be a chronic problem in Los Angeles, due to persistent poverty and growing unemployment in the region. Though Southern California is the most productive agricultural region in the country, more than one in 10 families (or over one million people) go hungry or face food insecurity in Los Angeles County. ¹ The public services available face low enrollment rates—less than 55% of LA County residents who are eligible for CalFresh are currently enrolled in the program. Due to this low rate of enrollment, the County loses almost one billion dollars a year in unclaimed nutrition assistance benefits.²

Paradoxically, due to disparities in the distribution of healthy food, many of Los Angeles' food insecure families may also struggle with obesity. In LA County, 61% of adults and 22% of kids are obese or overweight, and the County loses \$12 billion annually due to obesity related costs, such as health care and lost productivity.³⁴ Obesity and obesity-related diseases impact some Los Angeles communities more than others: in South Los Angeles, the rates of obesity, diabetes and poverty are three times greater than in West Los Angeles.⁵

Healthy Food Access & Retail Food Environments

The current Los Angeles regional food system has a disproportionately greater negative impact on low-income residents and communities of color, whose neighborhoods are overwhelmed with fast food venues, liquor stores, and convenience stores, but lack healthy food options, such as full-service grocery stores and farmers' markets. Predominantly white neighborhoods in Los Angeles have three times as many supermarkets as predominantly black neighborhoods, and nearly twice as many markets as neighborhoods with a Latino majority.⁶

Local retail food environments impact residents' choices when buying and eating food. As with many cities around the country, inequitable development and historical redlining by banks has resulted in insufficient and often poor quality food retail services in many low-income neighborhoods and communities of color.⁷ Unhealthy food environments such as these are sometimes described as "food deserts" (a scarcity of healthy food options) or "food swamps" (retail outlets dominated by unhealthy food). Residents report that the produce available in local stores in South Los Angeles as "not good quality" more than in other parts of the county.⁸ South Los Angeles residents also report the lowest percentage of daily fruit and vegetable consumption in the county, and one of the highest percentages of weekly fast food consumption.⁹

¹ Los Angeles Regional Foodbank. (2010). Hunger in Los Angeles County 2010. Retrieved from http://www.lafoodbank.org/source/Editorfile/ HILAC2010(2).pdf

² Shimada, T. (2009). Lost dollars, empty plates: The impact of CalFresh participation on state and local economies. Oakland: California Food Policy Advocates. Retrieved from http://cfpa.net/CalFresh/CFPAPublications/LDEP-FullReport-2012.pdf

³ Los Angeles County Department of Public Health. (2011). Key indicators of health by service planning area - 2011.

⁴ California Center for Public Health Advocacy. (2009). Economic Costs of Physical Inactivity, Obesity, and Overweight in California Adults - 2006. New Bern, NC: Chenoweth & Associates.

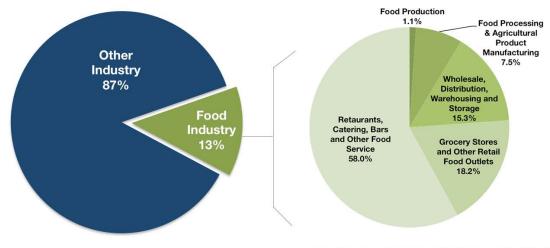
⁵ Op. cit. 26.

⁶ Shaffer, A. (2002). The persistence of L.A.'s grocery gap: The need for a new food policy and approach to market development. Los Angeles: The Center for Food and Justice, The Urban and Environmental Policy Institute: Occidental College. Retrieved from http://departments.oxy.edu/uepi/cfj/publications/Supermarket%20Report%20November%202002.pdf

⁷ Bassford, N. Galloway-Gilliam, L. Flynn, G. (2010). Food desert to food oasis: Promoting grocery store development in South Los Angeles. Los Angeles: Community Health Councils. Retrieved from http://www.chc-inc.org/downloads/Food%20Desert%20to%20Food%20Oasis%20July%202010.pdf 8 lbid.

⁹ Los Angeles County Department of Public Health. (2011). Key indicators of health by service planning area - 2011. Los Angeles, CA: Los Angeles County Department of Public Health.

Good Food Economy & Food System Jobs



Food System Jobs as a Percentage of LA County Employment

U.S. Department of Labor, Bureau of Labor Statistics (2012)

Improving the market for Good Food (healthy, affordable, fair, sustainable) can go hand-in-hand with local economic development, the creation of good jobs throughout the food chain, and the promotion of sustainable food production practices. The Los Angeles regional food system can be an economic engine—consumers spend close to \$60 billion on food in our 10-county foodshed and \$25 billion on food in LA County. The LA region benefits from an extensive farming base that produces over \$11 billion in fruits, nuts and vegetables a year, as well as a large food processing and manufacturing sector. The vast size of the Los Angeles market presents an opportunity to build market demand for Good Food by leveraging the purchasing power of large-scale institutions such as government agencies, hospitals and universities.

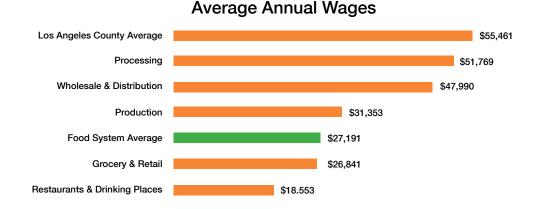
The food system accounts for 1 in 7.5 jobs in Los Angeles County.¹ Unfortunately, the health and well being of farm and food workers are often sacrificed to reduce labor costs and meet demands for cheaper food. According to the Department of Labor, seven of the 10 worst paying jobs in the US are in the food system.² Farm and restaurant workers are often exploited, and meatpackers face dangerous working conditions. Ironically, 23% of food system workers in California receive such low wages that they must rely on CalFresh food assistance benefits to feed themselves.³

2 US Bureau of Labor Statistics (2011). Occupational Employment and Wages. Retrieved from http://www.bls.gov/news.release/ocwage.htm 3 Current Population Survey (2011)

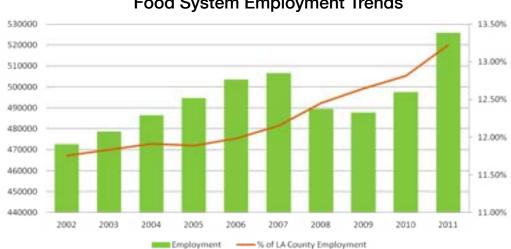
¹ California Employment Development Department. (2011). Labor Market Info: Quarterly Census of Employent and Wages. Retrieved from http://www.labormarketinfo.edd.ca.gov/?pageid=1016

Efforts are being made on the neighborhood level to attract more good food businesses, and provide healthy food options and local jobs to the underserved parts of Los Angeles. Other community-based initiatives promote neighborhood assets and boost small businesses. In recent years, many food entrepreneurs and activists have mobilized to legalize street food vending (with an emphasis on healthy foods) in the City of Los Angeles. A number of programs in LA County also support independent food markets and convenience stores in an effort to profitably expand their selections of healthy food and produce.

OVERVIEW OF FOOD SYSTEM JOBS IN LA COUNTY



Please note: annual average wages are inclusive of both supervisory and non-supervisory workers. For a detailed breakdown of median hourly wages by occupation, please see Appendix E.



Food System Employment Trends

Regional Farms & Urban Agriculture

The Los Angeles regional foodshed, which spans a 200-mile, ten-county region around the Los Angeles urban core, is the largest producer of fruits, vegetables and nuts in the nation. Yet most of the produce grown in our foodshed is exported outside of the region, often at an economic loss to local small and mid-sized farmers, who do not have the capacity to supply large retail buyers such as supermarket chains. Building the market for Good Food in Los Angeles can generate business for regional farms, contribute to the local economy, and reduce our reliance on imported food.

Urban agriculture has many forms: commercial farms, community, school, rooftop and backyard gardens, nurseries, animal rearing, beekeeping, and much more. In addition to commercial farms, a recent study found that there are over 1,200 urban agricultural sites in Los Angeles County.¹ These small-scale agricultural enterprises foster the development of a sustainable, local, food-growing system in Los Angeles and produce a host of additional benefits to our communities and health. A groundswell of grassroots urban agricultural initiatives have revealed a need for new programs and comprehensive policy reforms that will make it easier for the population to engage in growing food in the Los Angeles region.

1 UCLA Master of Urban and Regional Planning Capstone Project. (2013) Cultivate LA. Retrieved from http://cultivatelosangeles.org/



FOOD SYSTEM SNAPSHOT FINDINGS

Regional Foodshed

INDICATOR	BASELINE STATISTIC	SOURCE	
Long-Term Outcome: Stability in small and mid-scale family	farming (less than 500	acres)	
Number of farms in LA foodshed (2007)	23,001	NASS Census of Agriculture	
Percentage of small farms in LA foodshed (<180 acre) (2007)	87%	NASS Census of Agriculture	
Percentage of mid-sized farms in LA foodshed (180-499 acres) (2007)	6%	NASS Census of Agriculture	
Percentage of large farms in LA foodshed (>500 acres) (2007)	7%	NASS Census of Agriculture	
Median farm size in LA foodshed (2007)	39.8 acres	NASS Census of Agriculture	
Median LA County farm size (2007)	5 acres	NASS Census of Agriculture	
Long-Term Outcome: Increased participation in farming by r	new generation, women	, minority, disabled, and veteran farmers	
Number of women-operated farms in LA foodshed (2007)	5,098 (22%)	NASS Census of Agriculture	
Number of minority-operated farms in LA foodshed (2007)	3,181 (14%)	NASS Census of Agriculture	
Long-Term Outcome: A growing regional food economy			
Total fruit and vegetable production value in LA foodshed (2012)	\$11,387,907,856	CA County Agricultural Commissioner Crop Reports	
Number of food system jobs in LA foodshed (2012)	1,311,483 (13%)	Quarterly Workforce Indicators Data. Longitudinal-Employer Household Dynamics Program	
Total food system jobs in LA County (2012)	520,494 (13%)	California Employment Development Department	
Long-Term Outcome: Maintained use of farmland in agricultural production			
Acres of agricultural land in LA foodshed (2010)	8,022,172	California Department of Conservation Farmland Mapping and Monitoring Program	
Acres of agricultural land converted to urban and built land in LA foodshed (2004-2010)	87,169 acres	California Department of Conservation Farmland Mapping and Monitoring Program	
Percentage of agricultural land converted to urban and built land in LA foodshed (2004-2010)	2.32%	California Department of Conservation Farmland Mapping and Monitoring Program	
Long-Term Outcome: Increased direct-to-consumer sales			
Farms with direct sales in LA foodshed (2007)	2,043	USDA ERS Food Environment Atlas	
Value of direct sales in LA foodshed (2007)	\$45,842,000	NASS Census of Agriculture	
Food hubs in LA County (2012)*	0	USDA ERS Food Environment Atlas	

*Note on food hubs in Los Angeles County: The 2007 USDA NASS Census of Agriculture identified one food hub in Los Angeles County. However, our reviewers felt that the location listed did not meet the USDA criteria for a food hub and recommended it not be designated as such in this report.

Pending indicators: Number of new generation-, disabled- and veteran-operated farms in LA foodshed, percentage of agricultural production from small and mid-scale family farms

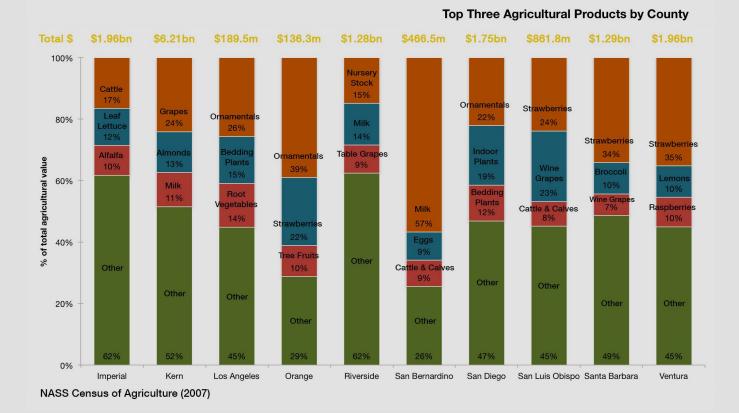
From Farm to Fork: Understanding the Scope of the LA Regional Foodshed

BY RACHEL SURLS SUSTAINABLE FOOD SYSTEMS ADVISOR, UC COOPERATIVE EXTENSION

As recently as the early 1950's, Los Angeles County was the number one agricultural county in the United States, its farms producing an abundance of fruit, vegetables, eggs, milk, honey and much more. Today, we tend to think of the county's 10 million residents in strictly urban terms, but the most current available statistics from the USDA Census of Agriculture (2007) showed 1,734 farms in LA county. Though ornamental plants are now our biggest crop, more than \$31 million in vegetable crops came from Los Angeles County farms in 2011, according to the County's most recent Crop and Livestock Report. The bulk of the vegetables we produce are root crops, which include onions, carrots and potatoes. Most commercial farming takes place in the high desert around Lancaster and Palmdale, and is seldom seen

by the bulk of the county's population. A sprinkling of small urban farms is also cropping up around the county.

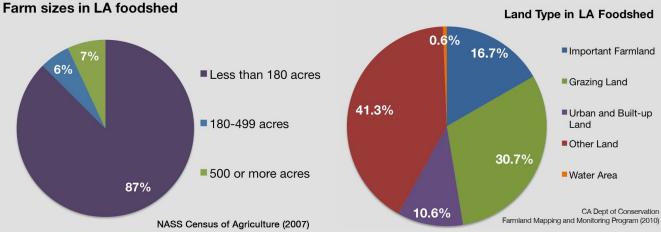
The amount of food produced in Los Angeles County is just a tiny portion of what's produced in our regional foodshed, a 10-county region with some of the most productive farmland in the state, encompassing some 23,000 farms. Strawberries and lemons from Ventura County, lettuce and broccoli from Imperial, and milk and almonds from Kern are some of the highest value farm products in California, as well as in the 200-mile radius from Los Angeles' urban core that constitutes our foodshed.



Continued on next page ...



The food system as a whole-including production, handling, processing, distribution, marketing and food service-is an economic engine critical to the success of our regional economy. It generates well over half a million jobs in Los Angeles County, and 1.3 million jobs in the 10-county foodshed. Yet much of what is produced is shipped to far away markets, and does not reach the plates of area residents. Lack of affordable fresh fruits and vegetables is a fact of life in many Los Angeles County neighborhoods, despite their geographic proximity to agricultural bounty. Creating better connections between food producers and consumers is one way that the Los Angeles Food Policy Council and its network of partners can help to make the vision of "Good Food For All" a reality.



Environmental Sustainability

	INDICATOR	BASELINE STATISTIC	SOURCE
	Long-Term Outcome: Increased organic production practices	S	
	Number of certified organic farms in LA foodshed (2007)	1,120 (5%)	NASS Census of Agriculture
) SOIL	Number of certified organic farms in LA County (2011)	28	LA County Agricultural Commissioner/ Weights and Measures
	Total tons of pesticides applied in LA foodshed (2011)	27,945 tons	CA Department of Pesticide Regulation
LAND AND	Percentage of pesticides applied for agricultural uses in LA foodshed (2011)	86%	CA Department of Pesticide Regulation
	Long-Term Outcome: Improved soil quality	-	
	Erosion rate in tons per acre per year on croplands in Pacific region (CA, OR, WA) (2007)	3.8 tons	USDA National Resources Conservation Service
	Erosion rate in tons per acre per year on croplands in the U.S. (2007)	4.8 tons	USDA National Resources Conservation Service
	Long-Term Outcome: Reduced air pollution and greenhouse	gas emissions tha	t contribute to climate change
	Percentage of greenhouse gas emissions due to agriculture in California (2010)	7% (32.4 out of 451.60 million metric tons)	California EPA Air Resources Board
	Percentage of agricultural greenhouse gas emissions due to livestock production in California (2010)	60% (19.6 out of 32.4 million metric tons)	California EPA Air Resources Board
AIR	Average amount of nitrogen oxide (NOX) emitted from agricultural production in LA foodshed (2008)	32.74 tons/day	California EPA Air Resources Board
	Average amount of fine particles (PM2.5) emitted from agricultural production in LA foodshed (2008)	10.32 tons/day	California EPA Air Resources Board
	Long-Term Outcome: Decreased meat consumption		
	Annual per capita disappearance of red meat and poultry in U.S. (2012)	168.7 pounds	USDA Economic Research Service
	Annual per capita disappearance of eggs in U.S. (2012)	250 eggs	USDA Economic Research Service
	Long-Term Outcome: Decreased water usage in agricultural	production	
œ	Agricultural applied water use in LA foodshed (2010)	7,264.2 thousand acre- feet	California Department of Water Resources
WATER	Long-Term Outcome: Decreased groundwater contamination from agricultural production		
5	Average levels of nitrate in runoff from agriculture detected in Los Angeles County (2012)	10.1 mg/L	Los Angeles Regional Water Quality Control Board
	Average levels of nitrate in runoff from agriculture detected in Ventura County (2012)	20.8 mg/L	Los Angeles Regional Water Quality Control Board

Pending indicator: Amount of diesel emissions from food production and food-related transportation

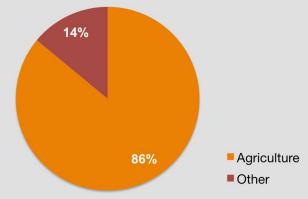
Connecting Food and the Environment

BY PAULA DANIELS, FOUNDING CHAIR OF THE LOS ANGELES FOOD POLICY COUNCIL

The environment and food production are intimately, intricately intertwined. The natural resources which feed the plants and animals that in turn feed us are what provide not only sustenance but also style, in terms of flavor and quality. However, intensive production has its impacts, no matter how careful the management. Our everyday food choices accumulate and magnify through the food chain. Even a seemingly innocent choice-such as a handful of strawberriescan have a ripple of consequences. Conventional growing practices for strawberries often involve soil fumigation with the toxin methyl bromide, which can harm the workers in the fields as well as the microbial ecosystem in the soil. Nitrate pollution in the runoff from fertilizers and livestock can choke our water supply. The transportation of food involves the same air pollution and greenhouse gas emissions that we worry about with our other uses of petroleum.

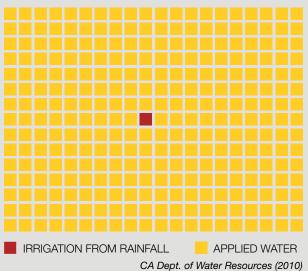
But the picture need not be bleak. We are making a difference every day with our informed food choices, and we hope to measure that over time, with the goal in mind of a healthier environment, producing our healthy food.

Pesticide usage in LA foodshed



CA Department of Pesticide Regulation (2011)

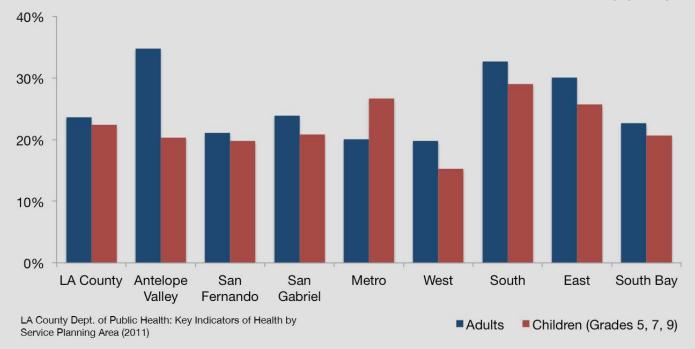
0.3% OF AGRICULTURAL WATER USAGE COMES FROM RAINFALL IN THE LA FOODSHED





Health

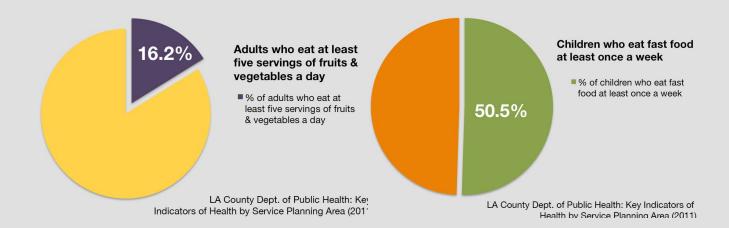
INDICATOR	BASELINE STATISTIC	SOURCE	
Long-Term Outcome: Decreased rates of overweight and ob	esity		
Percentage of 4 year old WIC participants that are obese or overweight in LA County (2012)	34.77%	Public Health Foundation Enterprise (PHFE) WIC Program	
Percentage of children in grades 5, 7, & 9 who are obese in LA County (2011)	22.4%	LA County Department of Public Health: Key Indicators of Health by Service Planning Area	
Percentage of adults who are obese or overweight in LA County (2011)	60.7%	LA County Department of Public Health: Key Indicators of Health by Service Planning Area	
Long-Term Outcome: Improved eating habits among adults a	and children		
Percentage of adults who eat fast food at least once a week in LA County (2011)	40%	LA County Department of Public Health: Key Indicators of Health by Service Planning Area	
Percentage of children who eat fast food at least once a week in LA County (2011)	50.5%	LA County Department of Public Health: Key Indicators of Health by Service Planning Area	
Percentage of children and teens who reported drinking at least one soda or sweetened drink a day in LA County (2011)	41.1%	Los Angeles County Department of Public Health	
Long-Term Outcome: Decreased death rates from diet-related diseases			
Diabetes death rate (age-adjusted) per 100,000 population (2011)	20.2	LA County Department of Public Health: Key Indicators of Health by Service Planning Area	
Coronary heart disease rate (age-adjusted) per 100,000 population (2011)	128.6	LA County Department of Public Health: Key Indicators of Health by Service Planning Area	



Percent of adults and children who are obese in LA County (2011)

"At the community level, the food environment also likely exerts a strong influence on food purchasing and consumption patterns...Given the complexity of food environments, it will be important to identify those combinations of interventions that together generate meaningful improvements in dietary practices at the population level and reduce the huge disparities in overweight and obesity. The burden of chronic disease and gravity of the obesity epidemic demand no less."

—Dr. Paul Simon, Director of the Division of Chronic Disease and Injury Prevention, Los Angeles County Department of Public Health

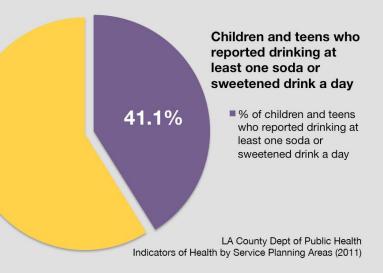


A Healthy Food System: The Key to a Healthier Los Angeles

BY DR. WENDY SLUSSER, MEDICAL DIRECTOR, UCLA FIT FOR HEALTH PROGRAM

Indicators of a healthy food system are evident in the health status and behaviors of all Los Angeles residents, from infants to seniors. If you think of the old adage, "you are what you eat," then the food we eat is the key to health. This starts from the day we are born, although pre-pregnancy and pregnancy are also critical periods when diet influences health. Thus to ensure a healthy population, a robust and vibrant food system in Los Angeles is an essential part of the equation.

Measurements of childhood obesity also reflect the burden of a number of related conditions, such as mental health, school performance and musculoskeletal disorders. Unfortunately, childhood obesity tends to perpetuate into adulthood. Therefore the adult population's health outcomes related to obesity are the ultimate barometer on how well we have raised our infants and children, and improved our worksites and urban environment to promote



making the healthy choice the easy choice. To help us address the obesity problem, it is useful to monitor the eating behaviors that can be modified to reduce the rates of obesity to help us gauge progress towards more wholesome eating habits, that can in turn result in healthier weights. Ultimately, high impact interventions will happen when policy makers focus resources on the habits associated with improved weight outcomes that might change over time.



Retail Food Environment and Street Food

INDICATOR	BASELINE STATISTIC	SOURCE	
Long-Term Outcome: Increased access to healthy food in un	derserved neighborho	ods	
Number of full-service supermarkets in LA County (2011)	2,011	US Census Bureau: County Business Patterns	
Number of neighborhood markets* in LA County (2011)	1,025	US Census Bureau: County Business Patterns	
Number of convenience stores in LA County (2011)	621	US Census Bureau: County Business Patterns	
Number of liquor stores in LA County (2011)	1,135	US Census Bureau: County Business Patterns	
Number of farmers' markets in LA County (2013)	148	LA County Agricultural Commissioner	
Number of farmers' markets in the City of LA (2013)	72	LA County Agricultural Commissioner	
Number of farmers' markets in South LA (2013)	9	LA County Agricultural Commissioner	
Number of farmers' markets in West LA (2013)	16	LA County Agricultural Commissioner	
Number of neighborhood markets* in South LA (2011)	510	Network for a Healthy California	
Number of neighborhood markets* in West LA (2011)	121	Network for a Healthy California	
Grocery store square feet per person in South LA (2011)	1.5	Social Compact via Healthy City	
Grocery store square feet per person in West LA (2011)	2.6	Social Compact via Healthy City	
Percentage of restaurants in South LA that are fast food (2010)	72%	City of Los Angeles	
Percentage of restaurants in West LA that are fast food (2010)	41%	City of Los Angeles	
Number of stores engaged by the Healthy Neighborhood Market Network (2013)	223	Los Angeles Food Policy Council	
Long-Term Outcome: Increased economic opportunity through legalized sidewalk vending			
Number of sidewalk food vendors in LA County (2013)	12,000	Urban & Environmental Policy Institute	
Number of traditional food trucks operating in LA County (2009)	3,000	Asociacion de Loncheros	
Number of traditional food trucks operating in LA City (2009)	1,000	Asociacion de Loncheros	
Number of cities in LA County, out of 88 cities, that permit legal sidewalk food vending (2012)	57 (out of 88)	Urban & Environmental Policy Institute of Occidental College	
% of mobile food vendors graded by LA County Department of Public Health that received an 'A' grade (2013)	86% (6755 out of 7883)	LA County Department of Public Health	

Pending indicators: City incentives for healthy vending, estimated number of people served by sidewalk food vendors per day, number of street food vendors providing healthy food

*Please see the definition for neighborhood market in Appendix A.

Note on geographic comparisons: In the chart above, we looked at two regions of Los Angeles County to highlight disparities in the food retail environment and evaluated both sets of indicators against county and city-wide statistics. Information about South LA and West LA geographic boundaries is listed under Appendix D.

Creating Equitable Food Environments: The Importance of Accessible, Affordable, Healthy Food for All

BY MARY M. LEE, DEPUTY DIRECTOR, POLICYLINK

On a very fundamental level, the food system in the Los Angeles region—like the food system across the nation—is profoundly inequitable. Like many other communities in the US, Los Angeles is highly segregated by race and income, thus creating lowincome communities that face many social, economic and environmental challenges, including inadequate access to retailers offering healthy food. By contrast, an array of food retailers, including supermarkets, organic food stores and farmers' markets, are readily accessible in affluent white areas.

To better understand what is at stake, consider what accessible means in this context. Accessible can refer to a market in a geographic location that shoppers of all income levels can easily reach. However, distance becomes a factor even for those with cars, as the high cost of gas and the time it takes to get there ultimately makes the food more expensive. Therefore, accessible also means affordable—because if the price is prohibitive, consumers go without. In low-income areas and communities of color, if grocery stores are present at all, prices are often higher—and quality and variety is often lower—than markets in more affluent areas.

Unfortunately, the same communities that lack affordable, accessible food also have a very hard time finding healthy food, as they are often inundated with fast food restaurants and convenience and liquor stores. The combination of not enough healthy food and too much cheap, unhealthy food is not only unfair—the long-term consequences are deadly. Poor diet and inadequate activity have become the second leading cause of death in the U.S., hitting people of color the hardest. The absence of healthy food is a stark illustration of the fact that where you live affects your health. Inequitable food environments not only threaten the health of individuals but compromise the economic vitality of neighborhoods as well. Residents of such neighborhoods pay more for the food they buy, either because they must add the time and expense of traveling to stores in other areas to their food costs; or because nearby convenience stores and liquor stores charge more. Furthermore, neighborhoods that lack grocery stores or other healthy food retailers lose out on the direct economic benefits that stores generate, such as jobs, small business opportunities, and local and state tax revenues.

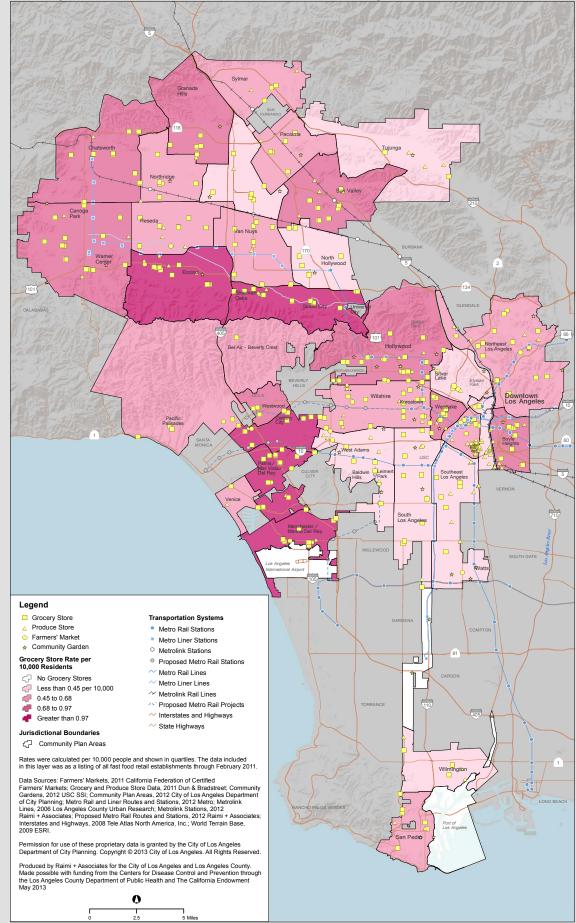
The good news is that promising new practices and innovative strategies implemented by nonprofit organizations, government agencies and community groups are beginning to yield results, making food environments healthier and more equitable. The result is increasing participation by community residents and stakeholders who examine their local food system and work with local and regional officials and agencies to insist on policy changes that will support the development of healthy food retail that will meet their needs.

Ultimately, the food system in Los Angeles will only be sustainable if it is also equitable. We can start the process by increasing access to healthy food in every neighborhood in our region.



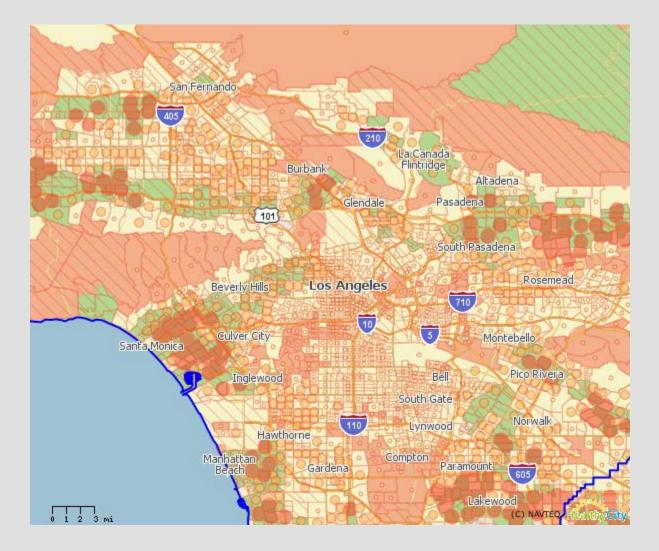
CITY OF LOS ANGELES

Grocery Store Rate per 10,000 Residents and Healthy Food Sources (2011)



RETAIL FOOD ENVIRONMENT MAP: GROCERY LEAKAGE & GROCERY SQUARE FOOTAGE PER PERSON IN LA COUNTY

Grocery leakage is an indicator of poor access to grocery services. When residents must leave their own neighborhood for grocery purchases, this can be described in terms of the amount of dollars "leaking" into neighboring areas that do have adequate food retail services. Thus, the neighborhoods with a negative grocery leakage figure are those with sufficient grocery retail outlets that attract residents from other neighborhoods.



Food Access & Security: Grocery Leakage

Total grocery leakage (net grocery expenditure being spent by residents outside of their area)

- 📕 \$400m to -\$5m
- \$5m to \$0m
- \$0m to \$36m

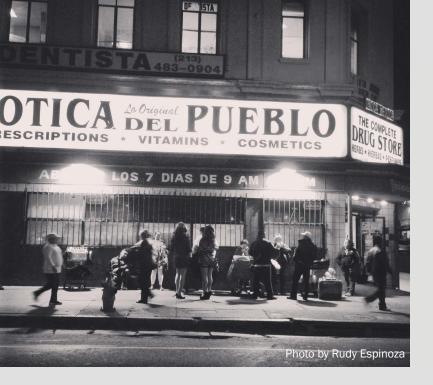
Universe: Grocery Spending (\$). Datasource: Social Compact. Data Year: 2011. Data Level: Census Tract Note: negative leakage means that the area is attracting residents from outside to buy groceries there.

Food Access & Security: Grocery Store Square Feet Per Person

Grocery square foot space per person

- 0.0 2.00
- 2.0 3.10
- 9.1 166.8

Universe: Grocery Square Footage. Datasource: Social Compact. Data Year: 2011. Data Level: Census Tract (2010)





Note: There are 88 cities in LA County Urban & Environmental Policy Institute (2012)

"Street vendors are an undeniable piece of Los Angeles culture and food retail, especially in low-income neighborhoods. Their sheer numbers represent a huge opportunity to engage these entrepreneurs in not only selling food legally, but selling healthy food that can address the food access issues that residents of 'food deserts' face."

> -Rudy Espinoza, Executive Director, Leadership for Urban Renewal Network (LURN)



Food System Workers

INDICATOR	BASELINE STATISTIC	SOURCE
Long-Term Outcome: Family-supporting wages for food work	iers	
Total food system jobs in LA foodshed (2012)	1,311,483 (13%)	Quarterly Workforce Indicators Data. Longitudinal-Employer Household Dynamics Program
Total food system jobs in LA County (2012)	520,493 (13%)	California Employment Development Department
Median hourly wage of food system workers in LA foodshed vs. median hourly wage of all workers in LA foodshed (2012)	\$16.61 vs. \$17.15	Occupational Employment Statistics Survey
Median hourly wage of non-supervisory food system workers in LA foodshed (2012)	\$10.20	Occupational Employment Statistics Survey
Average hourly living wage for household with two adults & one child in LA foodshed (2013) ²⁰	\$20.07	MIT Living Wage Calculator
Percentage of food system workers using CalFresh food assistance in California vs. general population usage in California (2011)*	23% vs. 11%	Current Population Survey
Rate of food insecurity among food system workers in California vs. general population in California (2011)*	18% vs. 17%	Current Population Survey, USDA
Percentage of non-supervisory food system workers with health insurance in California (2011)*	54%	American Community Survey

*County-level data unavailable at this time.

Pending indicators: Union density rates among food system workers, CalFresh usage among food system workers in LA foodshed, rate of food insecurity among food system workers in LA foodshed, median hourly wage of non-supervisory food system workers in LA foodshed vs. median hourly wage of all non-supervisory workers in LA foodshed.

For a complete list of NAICS codes, occupational codes, and SOC codes used in our data collection, please refer to Appendix D of this report.

²⁰ MIT Living Wage Calculator provides a minimum estimate for the cost of living for a household with two adults and one child in the LA foodshed 2013, Retrieved from http://livingwage.mit.edu/counties/06037

The Hands That Feed Us

BY JOANN LO, EXECUTIVE DIRECTOR, FOOD CHAIN WORKERS ALLIANCE

The food system employs almost 20 million people in the U.S., comprising one-sixth of the nation's workforce, making it the largest employment sector in the country. In Los Angeles County, one in seven people work in the food system. This includes workers on farms and in food, meat, and poultry processing plants, warehouse and distribution centers, grocery and other food retail stores, restaurants and food service.

The vast majority of jobs along the food chain are, unfortunately, bad jobs. In a national survey of food system workers, the Food Chain Workers Alliance (FCWA) found that only 13.5% of the more than 600 workers surveyed earn a livable wage, meaning that almost seven out of every eight workers are earning subminimum, poverty, or low wages. The median wage of surveyed workers was \$9.65 per hour across the nation. As a result, food workers face higher levels of food insecurity, or the inability to afford to eat, than the rest of the U.S. workforce. Food workers across the country also use SNAP benefits, or food stamps, at over 1.5 times the rate of the general workforce.

The survey also revealed that 79% of the workers don't have paid sick days or don't know if they have

THE FOOD SYSTEM ACCOUNTS FOR 1 IN 7.5 JOBS IN LA COUNTY

\$10.20 23% 18% Median hourly wage of non-supervisory food system workers in LA foodshed

Percent of food system workers using food stamps in California

Rate of food insecurity among food system workers in California

"When I arrived in this country, you conform to what is given. I came by myself. It's very difficult living here without knowing anyone, not knowing where a store is, not having money to buy water or bread. When you find a job, if they offer you \$50, you don't have to think about it – you need this money, so you take it."

> Jose Juan Romero, restaurant worker & former food processing worker

paid sick days. Because of the lack of paid sick days, 53% of the surveyed workers said they had gone to work sick. This can have major implications for public health and food safety.

Jose Juan Romero, a restaurant worker, told us that one time he was so sick, "I didn't go to work for three days. When I got my check, it was only \$100 and I had to pay rent that day, which is \$300—I couldn't buy food or my Metro card."

The situation for the majority of food workers is terrible—low wages, no benefits, discrimination, no opportunities for training and advancement—but in researching our report, the FCWA also found out that some employers do treat their employees well and still make a profit. One of these employers profiled in our report is Good Girl Dinette, a local restaurant in Highland Park, run by Chef-Owner Diep Tran. Not only does Diep pay fair wages and serve food that is local, sustainable, and seasonal, she works to ensure that her restaurant reflects her values.

"When I interview someone, I tell them right off the bat, 'We don't tolerate homophobia, sexism, racism, or any kind of harassment, and if you have a problem with that, then this is not the place for you,'" she says.

In other places, workers are organizing to address issues like low wages, lack of benefits, and mistreatment on the job. You can find more information on these organizing campaigns and about food system workers at www.foodchainworkers.org.

Food Security

INDICATOR	BASELINE STATISTIC	SOURCE
Long-Term Outcome: Increased household food security		
Percentage of low-income adults that are food insecure in LA County (2011)	42.20%	UCLA Center for Health Policy Research
Long-Term Outcome: Decreased need for food assistance set	ervices	
Number of CalFresh participants in LA County (2013)	1,136,000	LA County Department of Public Social Services
Long-Term Goal: Improved participation rate by eligible resid	dents in food assistand	e services
LA County CalFresh participation rate (2011) (% of eligible residents receiving SNAP)	55%	California Food Policy Advocates
LA County CalFresh participation rate as compared to all CA counties (2013)	37 (out of 58 counties)	California Food Policy Advocates
Dollar amount of CalFresh benefits lost due to underutilization (2012)	\$993 million	California Food Policy Advocates
Long-Term Outcome: Improved participation rate by eligible	students in school me	al programs
Number of children eligible for free or reduced school meals in LA County (2012)	1,017,717	California Department of Education
Percentage of low-income students who participate in school lunch in LA County (2010-2011)	62%	California Food Policy Advocates
Percentage of low-income students who eat breakfast in school daily in LA County	29%	California Food Policy Advocates
Long-Term Outcome: Increase in farmers' markets incorpora	ating food assistance p	orograms
Percentage of farmers' markets accepting WIC in LA County (2013)	53%	California Department of Public Health
Percentage of farmers' markets accepting WIC in City of LA (2013)	46%	California Department of Public Health
Percentage of LA County farmers' markets accepting EBT (2013)	39%	LA County DPSS; LA County Department of Public Health
Percentage of City of LA farmers' markets accepting EBT (2013)	38%	LA County DPSS, LA County Department of Public Health
Number of Senior Farmers' Market Nutrition Program vouchers issued in LA County (2013)	11,954	California Department of Food and Agriculture
Number of farmers' markets accepting Market Match in LA County (2013)	18	Hunger Action Los Angeles

Pending indicators: High school lunch participation rate, number of farm-to-school programs in LA County, improvement to quality of food including farm-to-school, -garden, -cafeteria



"In many ways, food security is the key measure of families' food resilience. All parents want to provide adequate, nourishing meals for their children...yet the economic pressures of the recession and persistent poverty cause too many Angelenos to struggle to put good food on the table. Fortunately, significant federal resources are available to address the uncertainty and unfairness of hunger and poor nutrition. These investments—in CalFresh, Child Care Nutrition, School Breakfast—provide a strong foundation for helping families reach food security, while boosting the local economy. It's time to start closing the gap."

-Matthew Sharp, Senior Policy Advocate, California Food Policy Advocates

4 OUT OF 10 LOW-INCOME ADULTS IN LA COUNTY ARE FOOD INSECURE

UCLA Center for Health Policy Research (2011)

LOCATIONS OF FARMERS' MARKETS IN LA COUNTY



Los Angeles Farmers' Market Finder. (2013). Ecology Center. http://ecologycenter.org/fmfinder/

"Farmers' markets represent a key opportunity to connect communities to locally grown, seasonal fresh produce—the foods that make the foundation of a healthy diet. Farmers markets' can transform any neighborhood into a place where fresh, healthy food is easily and conveniently available. And when markets accept nutrition assistance programs like WIC and SNAP, it helps ensure that all community members, regardless of income, can participate. The LAFPC "Farmers' Markets for All" Working Group is focused on increasing direct farmerto-consumer access to bring the benefits of fresh, healthy food to as many people as possible throughout LA County."

-Farmers' Markets for All Working Group (facilitated by LAFPC)



Urban Agriculture

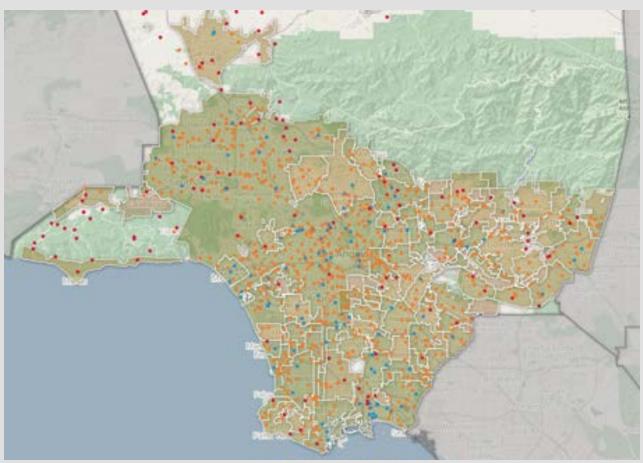
INDICATOR	BASELINE STATISTIC	SOURCE	
Long-Term Outcome: Increase in urban agriculture			
Number of farms in LA County (2007)	1,734	NASS Census of Agriculture	
Land in farms in LA County (2007)	108,463 acres	NASS Census of Agriculture	
Total market value of agricultural production in LA County (2007)	\$325,880,000	NASS Census of Agriculture	
Acres of grazing land in LA County (2010)	231,287 acres	California Department of Conservation Farmland Mapping and Monitoring Program	
Number of registered beekeepers in LA County (2013)	92	LA County Department of Agricultural Weights and Measures	
Number of urban agricultural sites* in LA County (2013)	1,261 Cultivate LA (UCLA/UCCE)		
Number of community gardens in LA County (2013)	118	Cultivate LA (UCLA/UCCE)	
Number of community gardens in the City of LA (2013)	45	LA Neighborhood Land Trust	
Number of school gardens in LA County (2013)	761	Cultivate LA (UCLA/UCCE)	

*Urban agricultural sites in LA County include school gardens, community gardens, farms and nurseries

Pending indicators: Information on gardening programs in hospitals, schools, churches, housing; acreage of agricultural land use in zoning code for City and County; number of aquaculture sites in LA County; number of edible parkway gardens in the City of LA

"Encouraging and incentivizing urban agriculture is a key strategy for reducing food insecurity and limited access to food in underserved communities. Connecting residents with land in their own neighborhood to grow food is most effective for ensuring increased consumption of healthy, fresh food and fosters greater self-reliance and community building. Eating local moves beyond the catch phrase when every resident across this city has the opportunity to harvest their own food, whether from their front yard, apartment rooftop or local community and school garden."

Francesca De La Rosa, Director of Strategy and Strategic Alliances,
Women Organizing Resources Knowledge + Services (WORKS)



MAP OF URBAN AGRICULTURAL SITES IN LA COUNTY

There are 1,261 urban agricultural sites in LA County. Cultivate Los Angeles: An assessment of Urban Agriculture in Los Angeles. (2013). University of California, Los Angeles, Luskin School of Public Affairs Interactive map available at http://cultivatelosangeles.org

Animal Welfare

INDICATOR	BASELINE STATISTIC	SOURCE
Long-Term Outcome: Humane treatment of animals produce	ed for consumption	
Average number of cattle per farm in California (2007)	18,796	NASS Census on Agriculture
Average number of dairy cows per farm in California (2007)	1,521	NASS Census of Agriculture
Average number of hogs per farm in California (2007)	11,921	NASS Census of Agriculture
Average number of broilers (chickens) per farm in California (2007)	1,416,818	NASS Census of Agriculture
Average number of layers (egg-laying hens) per farm in California (2007)	532,498	NASS Census of Agriculture

Pending indicators: Antibiotics used for growth promotion or disease prevention in livestock, information on density ratio (the number of animals per acre in LA foodshed)

"As a supply chain manager, producers often send me statements about how well they care for their animals. In most cases, even from the biggest companies, they are sincere in their belief that they are doing the 'right' thing and it's no wonder. Animal 'production systems' have become so big



Average number of animals per farm in CA NASS Census of Agriculture (2007)

that "care" is a self-referential notion. The routine use of antibiotics is viewed among many producers as 'good care' for animals. I disagree. If we designed our animal husbandry so routine antibiotics weren't needed, animal welfare would improve and we'd still be able to produce a lot of food for people who want to eat meat and dairy products."

> —Helene York, Global Director, Responsible Business, Bon Appétit@Google



Food Waste

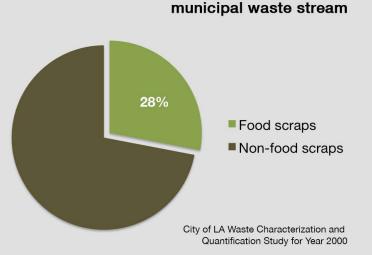
INDICATOR	BASELINE STATISTIC	SOURCE	
Long-Term Outcome: Decreased food waste			
Percent of food wasted across supply chain in U.S. (2011)	40%	National Resources Defense Council	
Estimated national percentage of produce losses at the farm level (2012)	20%	Food and Agriculture Organization	
Surplus food recovered from farms to food banks in California (2012)	67,500 tons	CDFA, California Association of Food Banks	
Food scraps as a percentage of total waste stream disposed in landfills in City of LA (2000)	28%	City of LA Waste Characterization and Quantification Study for Year 2000	
Long-Term Outcome: Increased food waste recycling			
Food scraps sent to landfills or incinerators in City of LA per year (2000)	815,000 tons	City of LA Waste Characterization and Quantification Study for Year 2000	
Tons of food scraps composted in City of LA per year (2000)	40,000 tons (5%)	City of LA Waste Characterization and Quantification Study for Year 2000	



"Getting food from the farm to our fork eats up 10 percent of the total U.S. energy budget, uses 50% of U.S. land, and swallows 80% of all freshwater consumed in the United States. Yet, 40% of food in the United States today goes uneaten. This not only means that Americans are throwing out the equivalent of \$165 billion each year, but also that the uneaten food ends up rotting in landfills as the single largest component of U.S. municipal solid waste where it accounts for a large portion of U.S. methane emissions. Reducing food losses by just 15% would be enough food to feed more than 25 million Americans every year at a time when one in six Americans lack a secure supply of food to their tables. Increasing the efficiency of our food system is a

triple bottom-line solution that requires collaborative efforts by businesses, governments and consumers. No matter how sustainably we produce our food, if it's not eaten, it's a terrible use of resources."

-Dana Gunders, Project Scientist, National Resources Defense Council



Food scraps as a percentage of total



Mission

The Los Angeles Food Policy Council (LAFPC) is a collective impact initiative, working to make Southern California a Good Food region for everyone—where food is healthy, affordable, fair and sustainable.

The Los Angeles Food Policy Council, a project of Community Partners, brings together leaders and experts from across sectors, geographies, and socio-economic communities to strengthen connections throughout the food system, and to facilitate and coordinate systemic change.

LAFPC leverages its unique structure and placement as an independent multi-stakeholder initiative located in City Hall to advance innovative food policies. The 40-member Leadership Board and its staff serve as the "backbone" organization for the initiative. Additionally, 500 individual stakeholders and over 150 organizations from the public, private, nonprofit and academic sectors extend the reach of LAFPC in the greater Los Angeles community.

Through policy creation and cooperative relationships, organizational goals are to reduce hunger, improve public health, increase equity in our communities, create good jobs, stimulate local economic activity, and foster environmental stewardship. In particular, the LAFPC aims to connect environmental sustainability and local agriculture with efforts to expand access to healthy food in underserved communities.

Catalyze, Coordinate, Connect

LAFPC operates as a network to build connections, catalyze opportunities, and coordinate activities toward building a sustainable and equitable regional food system for all Angelenos.

The work of the LA Food Policy Council includes:

- 1. Identifying best practices,
- 2. Providing a forum for discussing food-related problems and opportunities,
- 3. Engaging key stakeholders,
- 4. Serving as an information resource,
- 5. Providing recommendations to policy makers and key food system stakeholders,
- 6. Providing support for the ongoing work of its members and partners,
- 7. Facilitating collaboration in the development of more coherent, systemic change
- 8. Incubating projects and programs, which are strategically identified through our stakeholder process as needed.

Los Angeles Food Policy Council Programs

The Los Angeles Food Policy Council runs two programs designed to address some of the needs of the LA regional food system: The Good Food Purchasing Program and the Community Market Conversion Program.

The **Good Food Purchasing Pledge** (GFPP) harnesses the purchasing power of major institutions to encourage greater production of sustainably produced food, healthy eating, respect for workers' rights, humane treatment of animals and support for the local business economy by providing new opportunities for small and mid-sized farmers and job creation along the supply chain. By building the market for Good Food, GFPP will also provide low-income residents in urban communities access to affordable, healthy, fair and sustainable food options.

The program promotes increasing levels of achievement in five crucial categories: (1) local economies, (2) environmental sustainability, (3) valued workforce, (4) animal welfare, and (5) nutrition. A tiered, points-based scoring system allows participants to choose which level of commitment best suits the Good Food goals of their organization. Participants are then awarded one to five stars based on their total score. To encourage participation, the program provides technical assistance in sourcing, monitoring progress, and measuring and recognizing success.

The GFPP initiative is the most comprehensive and metric-based food purchasing policy of its kind in the nation and was developed by the LA Food Policy Council. It is a model that can be easily adopted by other cities.

The **Community Market Conversion (CMC) Program** and Healthy Neighborhood Market Network (HNMN) transform convenience stores in neighborhoods with limited healthy food access into healthy food community markets by providing technical, financial and community engagement resources to stores. Special emphasis is placed on building the capacity of neighborhood market owners, managers and staff to grow their businesses as healthy food retailers by connecting them to professional training, resources and networks of food industry experts and community-based organizations.

Strategic Priorities 2012-2013

The LA Food Policy Council has focused its efforts on the following top three priorities:

- 1. A coordinated healthy food neighborhoods strategy, with a focus on neighborhood market conversions.
- 2. A Good Food Purchasing Policy that leverages demand from large institutional purchasers.
- 3. Development of a Food Hub enterprise that can support local growers, connect retailers in low-income areas to locally produced food and provide business incubation for value added and prepared foods.

REPORT METHODOLOGY

The Los Angeles Food System Snapshot brings together data from research conducted by federal, state, regional, county and local government agencies, state academic institutions, and national, regional and local non-profit organizations, many of which are represented in the Los Angeles Food Policy Council network. The report framework and methodology draw from best practices identified in other regional and national food, public health and environmental report cards and reports.

Selection of Long-Term Outcomes and Indicators

OUR VISION FOR A HEALTHY FOOD SYSTEM:

- Prioritizes the health and well being of our residents.
- Makes healthy, high quality food affordable
- Contributes to a thriving economy where all participants in the food supply chain receive fair compensation and fair treatment.
- Protects and strengthens our biodiversity and natural resources throughout the region.
- Ensures that good food is accessible to all.

GOOD FOOD FOR ALL AGENDA PRIORITY ACTION AREAS

- 1. Promote a Good Food economy
- 2. Build a market for Good Food
- 3. Eliminate hunger in LA
- 4. Ensure equal access to Good Food in underserved communities
- 5. Grow good food in our neighborhoods
- 6. Inspire and mobilize Good Food champions

The process for identifying long-term outcomes to feature in this report began with the assistance of researchers from the University of Wisconsin-Madison (who are developing a case study of LAFPC through a USDA grant) and key local partners as part of a larger evaluation plan for the Los Angeles Food Policy Council's Good Food Purchasing Program. Through this process, a subset of long-term outcomes and indicators related to the Good Food Purchasing Program's five key food system values were selected. LAFPC expanded this framework by identifying long-term outcomes and goals related to the local food system and surveyed other national and regional food system assessments in the context of its own priority action areas.

The selection criteria for the 100+ indicators presented in the following pages included aligning the statistics with long-term outcomes and ensuring that the data sources were credible and relevant, publicly accessible, measured at a regional or local level, and updated frequently. The Los Angeles Food Policy Council relied on the feedback of its Leadership Board and other expert reviewers to refine the list of indicators so that the information presented is as comprehensive as possible given the availability of existing information.

Review Process

The development of the LA Food System Snapshot involved a detailed and collaborative review process. The report relied heavily on reviewer feedback from a team that consisted of food system experts and leaders in food-related fields. Reviewers included members of the Los Angeles Food Policy Council Leadership Board, Working Groups and network members. Additionally, we consulted with experts at state, regional and local government agencies, academic institutions, and national, regional and local non-profit organizations. A full list of contributors is included in the first few pages of this report.

Understanding the Data

The Snapshot is intended to provide a general
picture of the LA regional food system.
Long-term outcomes, indicators, baseline
statistics, and sources are organized by food
system topic areas to help readers understand
the current state of the food system and to use
as a tool to track changes over time.

- Long-Term Outcomes are broad objectives that reflect the missions of the Los Angeles Food Policy Council and its network of partner organizations.
- 2 Indicators describe the baseline statistics. Each indicator draws a picture of the food system topic area under which it is listed.
- 3 Baseline Statistics are numbers available in 2013 for each indicator listed. These metrics provide a starting point for measuring progress toward long-term outcomes.
- Sources indicate where the baseline statistics come from.

	BASELINE STATISTIC	4 SOURCE
Long-Term Outcome: Decreased rates of overweight and obes	sity	
Percentage of 4 year old WIC participants that are obese or overweight in LA County (2012)	34.77%	Public Health Foundation Enterprise (PHFE) WIC Program
Percentage of children in grades 5, 7, & 9 who are obese in LA County (2011)	22.4%	LA County Department of Public Health: Key Indicators of Health by Service Planning Area
Percentage of adults who are obese or overweight in LA County (2011)	60.7%	LA County Department of Public Health Key Indicators of Health by Service Planning Area
Long-Term Outcome: Improved eating habits among adults an	nd children	
Percentage of adults who eat fast food at least once a week in LA County (2011)	40%	LA County Department of Public Health Key Indicators of Health by Service Planning Area
Percentage of children who eat fast food at least once a week in LA County (2011)	50.5%	LA County Department of Public Health Key Indicators of Health by Service Planning Area
Percentage of children and teens who reported drinking at least one soda or sweetened drink a day in LA County (2011)	41.1%	Los Angeles County Department of Public Health
Long-Term Outcome: Decreased death rates from diet-related	l diseases	
Diabetes death rate (age-adjusted) per 100,000 population (2011)	20.2	LA County Department of Public Health Key Indicators of Health by Service Planning Area
Coronary heart disease rate (age-adjusted) per 100,000 population (2011)	128.6	LA County Department of Public Health Key Indicators of Health by Service Planning Area

Data Availability & Frequency

Pending indicators is a placeholder for suggested indicators for future data collection where data is currently unavailable. Data sources that are updated regularly are shown where available, but indicators in some topic areas describe data sourced from a one-time report or study. Below is a full list of pending indicators that would require additional data collection to be included in future reports. The complete list of indicators organized by data source and frequency of updates to source can be found in Appendix C.

TOPIC AREA	PENDING INDICATORS
Regional Foodshed	Number of new generation-, disabled- and veteran-operated farms in LA Foodshed
Regional Foodshed	Percentage of total agricultural production from small and mid-scale family farms in LA foodshed
Environmental Sustainability	Amount of diesel emissions from food production and food-related transportation
Retail Food Environment/Street Food	City incentives for healthy food vending
Retail Food Environment/Street Food	Estimated number of people served by sidewalk food vendors per day
Retail Food Environment/Street Food	Number of street food vendors providing healthy food
Food System Workers	Union density rates among food system workers
Food System Workers	CalFresh usage among food system workers in LA Foodshed
Food System Workers	Rate of food insecurity among food system workers in LA Foodshed
Food System Workers	Median hourly wage of non-supervisory food system workers in LA foodshed vs. median hourly wage of all non-supervisory workers in LA foodshed
Food Security	High school lunch participation rate
Food Security	Number of farm to K-12 programs in LA County
Food Security	Improvement in quality of food including farm-to-school, -garden, -cafeteria
Urban Agriculture	Information on gardening programs in hospitals, schools, churches, and housing
Urban Agriculture	Acreage of agricultural land use in zoning code for City and county
Urban Agriculture	Number of aquaculture sites in LA County
Urban Agriculture	Number of edible parkway gardens in the City of LA
Animal Welfare	Antibiotics used for growth promotion or disease prevention in livestock
Animal Welfare	Information on the number of animals per farm in LA Foodshed

APPENDIX

Appendix A: Glossary of Terms

Aquaculture is production of food fish, ornamental fish, baitfish, mollusks, crustaceans, aquatic plants and algae, and some reptiles such as alligators and turtles. These organisms are grown in a wide variety of climates, in either fresh or salt water, and use a number of different production systems. (USDA)

Broilers are chickens younger than 10 weeks old of either sex. Commercial chicken production is made up almost entirely of broilers. (USDA)

CalFresh is the name of California's food assistance program, part of the federal Supplemental Nutrition Assistance Program (SNAP). The California Department of Social Services determines which households are eligible to receive CalFresh benefits based on gross and net income determination tests. (CDSS)

Composting is the biological decomposition of organic materials such as leaves, grass clippings, brush, and food waste into a soil amendment. Composting is a form of recycling. (California Department of Resources Recycling and Recovery - CalRecycle)

Designated agricultural zone is a planning category within municipal and zoning codes that regulates the types of agricultural activities permitted within designated zones.

Farms with direct sales are farms that market their goods exclusively through direct-to-consumer channels, such as farmers' markets, roadside stands, community supported agriculture subscriptions and more. (USDA ERS)

EBT (or Electronic Benefits Transfer) is an electronic system that allows a recipient to authorize transfer of their government food assistance benefits (SNAP, CalFresh) from a Federal account to a retailer account to pay for products received. (USDA)

Erosion rate, calculated by the USDA Natural Resource Conservation Service, is an estimate of average annual (or expected) rates based upon long-term climate data, inherent soil and site characteristics, and cropping and management practices. (USDA) A **foodshed** is an area of land linked by a common local food source. Just as a watershed describes an area of land bounded by a common water source, a foodshed describes a geographic area bounded by its capacity to produce food for its occupants. (Los Angeles Urban Rural Roundtable)

A **food hub** is a centrally located facility with a business management structure facilitating the aggregation, storage, processing, distribution, and/or marketing of locally/ regionally produced food products. (USDA)

Food insecurity is a household-level economic and social condition of limited or uncertain access to adequate food. (USDA)

Food system workers are members of a workforce engaged in core food occupations and industries including farmworkers (production), slaughterhouse and other processing facilities workers (processing), warehouse workers (distribution), grocery store workers (retail), and restaurant and food service workers (service). (Food Chain Workers Alliance)

Greenhouse gas emissions are the release of any gas that absorbs infrared radiation in the atmosphere. These include carbon dioxide, methane, nitrous oxide, ozone, and more. (EPA)

Grocery leakage is net grocery expenditure being spent by residents outside of their area. (American Institute of Architects)

Layers are hens or pullets producing table or commercial type shell eggs. These hens are usually at least 20 weeks of age and may include the breeder hen that produces broilertype or egg-type hatching eggs. (USDA)

Living wage is a wage rate required to meet minimum standards of living. (MIT Living Wage Project)

Market Match is a statewide CalFresh incentive program offering additional money to CalFresh EBT cardholders (and sometimes those receiving WIC, Senior FMNP, and SSI benefits) who use their card to buy fresh fruits and vegetables at farmers' markets. (Ecology Center) **Mobile food vendors** is the classification used by the LA County Department of Public Health to describe hot food preparation trucks. (LACDPH)

Neighborhood markets, as defined by the Healthy Neighborhood Market Network, is a category of small convenience and grocery retailers that employ 1-5 employees. NAICS codes: 445110, 445120 (LAFPC)

Nitrate in runoff from agriculture refers to water runoff from agricultural lands that contains nitrate-based farm inputs such as fertilizers.

Obese is a health categorization defined as a Body Mass Index (BMI) at or above the 95th percentile. (CDC)

Other land is land not included in any other mapping category. Common examples include low density rural developments, brush, timer, wetland, and riparian areas not suitable for livestock grazing, confined livestock, poultry, or aquaculture facilities, strip mines, borrow pits, and water bodies smaller than 40 acres. Vacant and nonagricultural land surrounded on all sides by urban development and greater than 40 acres is mapped as other land. (CA Department of Conservation)

Overweight is a health categorization defined as a Body Mass Index (BMI) at or above the 85th percentile and lower than the 95th percentile. (CDC)

Per capita disappearance is a measurement of the amount of food available for consumption used to estimate actual food consumption. (USDA Economic Research Service)

Production losses at the farm level occur during the production and postharvest handling and storage steps of the supply chain. Food loss at the farm level falls into two categories: food that is never harvested and food that is lost between harvest and sale. (NRDC)

Senior Farmers' Market Nutrition Program awards grants to States, U.S. Territories, and federally recognized Indian tribal governments to provide low-income seniors with coupons that can be exchanged for eligible foods (fruits, vegetables, honey, and fresh-cut herbs) at farmers' markets, roadside stands, and community-supported agriculture programs. (USDA) Small, mid-sized and large farm size designations are based on the classification of farms by acreage in the 2007 USDA NASS Census of Agriculture. (USDA)

LA foodshed (or Los Angeles regional foodshed) is an area spanning a 200-mile radius from the Los Angeles urban core, covering ten Southern California counties: Imperial, Kern, Los Angeles, Orange, Riverside, San Bernardino, San Diego, San Luis Obispo, Santa Barbara, Ventura. See Foodshed for more information. (LAFPC)

South LA (South Los Angeles) refers to a geographic region covering the neighborhoods of Florence, Watts, Broadway-Manchester, Green Meadows, Vermont Slauson, Vermont Vista, University Park, Baldwin Hills, Leimert Park, Historic South Central, South Park, Central-Alameda, Baldwin Village, Mid-City, West Adams, Jefferson Park, Expo Park, Hyde Park, Vermont Knolls, Athens, Chesterfield Square, Green Meadows, West Compton, Vermont Square, Compton, Rancho Dominguez, and Paramount and the cities of Hawthorne, Inglewood, and unincorporated Lennox. For a list of zip codes, please refer to Appendix D of this report. (Community Health Councils)

Street food vending (or sidewalk food vending) is the preparation and sale of foods and beverages by vendors in streets and other public places for immediate consumption or consumption at a later time without further processing or preparation. (World Health Organization)

Thousand acre-feet is a unit of measurement equal to the volume of water that would cover an area of one thousand acres to a depth of one foot.

WIC (or the Special Supplemental Nutrition Program for Women, Infants and Children) provides federal grants for supplemental foods, health care referrals, and nutrition education for low-income pregnant, breastfeeding, and non-breastfeeding postpartum women, and to infants and children up to age five who are found to be at nutritional risk. Eligible recipients must meet income and gross income determination tests. (USDA)

West LA (West Los Angeles) refers to a geographic region covering the neighborhoods and cities of Beverly Hills, Brentwood, Culver City, Malibu, Pacific Palisades, Playa del Rey, Santa Monica, and Venice. For a list of zip codes, please refer to Appendix D of this report. (Community Health Councils)

Appendix B: Resource Guide

FEDERAL AGENCIES AND SURVEYS

USDA NASS Census of Agriculture www.agcensus.usda.gov/ **USDA Natural Resources Conservation Service** www.nrcs.usda.gov/ **USDA Economic Research Service** www.ers.usda.gov/ Bureau of Labor Statistics Occupational Employment Statistics Survey www.bls.gov/oes/ **US Census Bureau** www.census.gov/ American Community Survey www.census.gov/acs/ **Current Population Survey** www.census.gov/cps/ **County Business Patterns** www.census.gov/econ/cbp/ **Quarterly Workforce Indicators** lehd.ces.census.gov/

<u>Census Desktop Query Tools</u> American FactFinder factfinder2.census.gov/ DataFerrett dataferrett.census.gov/ USDA Desktop Query Tool http://www.agcensus.usda.gov/Publications/2007/Online_ Highlights/Desktop_Application/

CALIFORNIA STATE AGENCIES

Department of Conservation Farmland Mapping conservation.ca.gov/dlrp/FMMP/Pages/Index.aspx Department of Education www.cde.ca.gov/ Department of Pesticide Regulation www.cdpr.ca.gov/ **Department of Public Health** www.cdph.ca.gov/ **Department of Water Resources** www.water.ca.gov/ Economic Development Dept. www.labormarketinfo.edd.ca.gov/ EPA Air Resources Board www.arb.ca.gov/ Cal Recycle www.calrecycle.ca.gov/ Department of Food and Agriculture www.cdfa.ca.gov/

CDFA Agricultural Production Statistics http://www.cdfa.ca.gov/Statistics/

NATIONAL ORGANIZATIONS

Emerging Markets emergingmarkets.us **Feeding America** feedingamerica.org/ Food Chain Workers Alliance foodchainworkers.org MIT Living Wage Calculator livingwage.mit.edu/ NRDC Food http://www.nrdc.org/food/ PolicyLink www.policylink.org/ Social Compact www.socialcompact.org/ Wallace Center at Winrock International http://www.wallacecenter.org/

STATE ORGANIZATIONS

California Food Policy Advocates cfpa.net/ CA Association of Food Banks www.cafoodbanks.org/ HealthyCity www.healthycity.org/ Network for a Healthy California www.cdph.ca.gov/programs/CPNS/

REGIONAL ORGANIZATIONS

LA Regional Water Quality Control Board www.waterboards.ca.gov/rwqcb4 Public Health Foundation Enterprises WIC Program www.phfewic.org/

COUNTY AGENCIES

Imperial County Agricultural Commissioner www.co.imperial.ca.us/ag/ Kern County Department of Agriculture and Measurement Standards www.kernag.com/ Orange County Agricultural Commissioner ocagcomm.com/ Riverside County Agricultural Commissioner www.rivcoag.org San Bernardino Department of Agriculture /Weights and Measures

www.sbcounty.gov/awm

San Diego County Agriculture, Weights and Measures www.sdcounty.ca.gov/awm/ San Luis Obispo County Agricultural Commissioner www.slocounty.ca.gov/agcomm/Crop_Reports.htm Santa Barbara County Agricultural Commissioner /Weights and Measures www.countyofsb.org/agcomm/ Ventura Agricultural Commissioner portal.countyofventura.org/portal/page/portal/AgComm/

LOS ANGELES COUNTY AGENCIES

LA County Dept. of Public Health *publichealth.lacounty.gov/* LACDPH Environmental Health *ph.lacounty.gov/eh/* LA County Dept. of Public Social Services *www.ladpss.org/* Los Angeles County Agricultural Commissioner *acwm.lacounty.gov/*

LOCAL ORGANIZATIONS

Asociacion de Loncheros www.loncheros.com/ Community Health Councils www.chc-inc.org/ LAANE: Don't Waste LA Campaign www.dontwastela.com/ Los Angeles Street Food Vendor Campaign streetvendorcampaign.blogspot.com/

CITY OF LOS ANGELES AGENCY

Los Angeles Unified School District Food Services Division cafe-la.lausd.net/

ACADEMIC INSTITUTIONS

UC Cooperative Extension, Los Angeles County celosangeles.ucanr.edu/ UCLA Center for Health Policy Research www.healthpolicy.ucla.edu/ Urban & Environmental Policy Institute, Occidental College http://www.uepi.oxy.edu

REPORTS

California Food Policy Advocates. (2013). "Lost Dollars, Empty Plates." http://cfpa.net/CalFresh/CFPAPublications/ LDEP-FullReport-2013.pdf

California Food Policy Advocates. (2012). "Health Policy Brief: Nearly Four Million Californians Are Food Insecure." http://cfpa.net/CalFresh/Media/CHIS-HealthPolicyBrief-2012.pdf

CA EPA Air Resources Board. (2012). "GHG Emissions Data." http://www.arb.ca.gov/cc/reporting/ghg-rep/reported_ data/ghg-reports.htm#registering_specified

Community Health Councils. (2008). "South LA Health Equity Scorecard." www.chc-inc.org/downloads/South%20 LA%20Scorecard.pdf

UN Food and Agriculture Organization (2011). "Global Food Losses and Food Waste." www.fao.org/docrep/014/ mb060e/mb060e00.pdf

Food Chain Workers Alliance. (2012). "The Hands That Feed Us." http://foodchainworkers.org/wp-content/ uploads/2012/06/Hands-That-Feed-Us-Report.pdf

LA Dept. of City Planning. (2012). "Health Atlas Maps." http://planning.lacity.org/cwd/framwk/healthwellness/ healthwellness.htm

National Resources Defense Council - D. Gunders. (2012). "Wasted: How America Is Losing Up to 40 Percent of Its Food From Farm to Fork to Landfill." www.nrdc.org/food/files/wasted-food-ip.pdf

LA County Dept of Public Health: Key Indicators of Health (2013) http://publichealth.lacounty.gov/docs/keyindicators.pdf

Sierra Club Angeles Chapter (2013). "The Organics Project. "http://angeles2.sierraclub.org/news/blog/2012/12/ greening_our_waste_la_and_orange_counties

UCLA Luskin School of Public Affairs. (2013). "Cultivate Los Angeles" http://cultivatelosangeles.org

UCLA Luskin School of Public Affairs. (2012). "Small Market Sector: A Closer Look at the Food Retail Environment of Los Angeles" Correspondence with Hector Gutierrez, CHC

OTHER REPORT CARDS

Iowa Food Systems Council. (2011). "Cultivating Resilience: A Food System Blueprint." http://iowafoodsystemscouncil. org/food-access-health/

Goldhirsch Foundation. (2013). "LA2050 Report" http:// www.la2050.org/site/assets/files/1454/la2050_ report_021913.pdf

Heal the Bay (2012). "Beach Report Card." brc.healthebay. org/ $% \lambda = 0.012$

Santa Monica Office of Sustainability. (2012). "2012 Sustainable City Report Card" http://www.smgov.net/Departments/OSE/Categories/ Sustainability/Sustainable_City_Report_Card.aspx

Sustainable Long Island. (2013). "Food System Report Card."

http://sustainableli.org/what-we-do/food-equity/foodsystem-report-card/



Appendix C: Frequency of Data Updates

Indicators	Source	Frequency
Percentage of non-supervisory food system workers with health insurance in California (2011)*	American Community Survey	Annual
Total agricultural crop value in LA Foodshed (2012)	CA County Agricultural Commissioner Crop Report	Annual
Total tons of pesticides applied in LA Foodshed (2011)	CA Department of Pesticide Regulation	Annual
Percentage of pesticides applied for agricultural uses in LA Foodshed (2011)	CA Department of Pesticide Regulation	Annual
Number of children eligible for free or reduced school meals in LA County (2012)	California Department of Education	Annual
Number of WIC (Women, Infant, Children) authorized vendors in LA County (2013)	California Department of Public Health	Annual
Agricultural applied water use in LA Foodshed (2010)	California Department of Water Resources	Annual
Total food system jobs in LA County (2012)	California Employment Development Department	Annual
Percentage of greenhouse gas emissions due to agriculture in California (2010)	California EPA Air Resources Board	Annual
Percentage of agricultural greenhouse gas emissions due to livestock production in California (2010)	California EPA Air Resources Board	Annual
Percentage of low-income students who participate in school lunch in LA County (2010-2011)	California Food Policy Advocates	Annual
Percentage of low-income students who eat breakfast in school daily in LA County	California Food Policy Advocates	Annual
LA County CalFresh participation rate (2011) (% of eligible recipients receiving SNAP)	California Food Policy Advocates	Annual
LA County CalFresh utilization ranking as compared to all CA counties (2013)	California Food Policy Advocates	Annual
Dollar amount of CalFresh benefits lost due to underutilization (2012)	California Food Policy Advocates	Annual
Percentage of food system workers using CalFresh in California (2011)*	Current Population Survey	Annual
Rate of food insecurity among food system workers in California (2011)*	Current Population Survey	Annual
Number of organic certified farms in LA County (2011)	LA County Agricultural Commissioner/ Weights and Measures	Annual
Land in agricultural production in LA County (2011)	LA County Agricultural Commissioner/ Weights and Measures	Annual
Percentage of children in grades 5, 7, & 9 who are obese in LA County (2011)	LA County Department of Public Health: Key Indicators of Health by Service Planning Area	Annual
Percentage of adults who are obese or overweight in LA County (2011)	LA County Department of Public Health: Key Indicators of Health by Service Planning Area	Annual
Percentage of children and teens who reported drinking at least one soda or sweetened drink a day in LA County (2011)	LA County Department of Public Health: Key Indicators of Health by Service Planning Area	Annual
Percentage of children who eat fast food at least once a week in LA County (2011)	LA County Department of Public Health: Key Indicators of Health by Service Planning Area	Annual

Diabetes death rate (age-adjusted) per 100,000 population (2011)	LA County Department of Public Health: Key Indicators of Health by Service Planning Area	Annual
Coronary heart disease rate (age-adjusted) per 100,000 population (2011)	LA County Department of Public Health: Key Indicators of Health by Service Planning Area	Annual
Number of stores engaged by the Healthy Neighborhood Market Network	Los Angeles Food Policy Council	Annual
Average levels of nitrate in runoff from agriculture detected in Los Angeles County* (2012)	Los Angeles Regional Water Quality Control Board	Annual
Average levels of nitrate in runoff from agriculture detected in Ventura County* (2012)	Los Angeles Regional Water Quality Control Board	Annual
Median wage of all workers in LA Foodshed (2012)	Occupational Employment Statistics Survey	Annual
Median wage of non-supervisory food system workers in LA Foodshed (2012)	Occupational Employment Statistics Survey	Annual
Number of cities in LA County, out of 88 cities that permit legal sidewalk food vending (2012)	Urban & Environmental Policy Institute of Occidental College	Annual
Number of full-service supermarkets in LA County (2011)	US Census Bureau: County Business Patterns	Annual
Number of neighborhood markets* in LA County (2011)	US Census Bureau: County Business Patterns	Annual
Number of convenience stores in LA County (2011)	US Census Bureau: County Business Patterns	Annual
Number of liquor stores in LA County (2011)	US Census Bureau: County Business Patterns	Annual
Pounds per capita disappearance of red meat and poultry in U.S. (2012)	USDA Economic Research Service	Annual
Per capita disappearance of eggs in U.S. (2012)	USDA Economic Research Service	Annual
Percentage of Californians using CalFresh (2013)	USDA; Census Bureau	Annual
Acres of agricultural land converted to urban and built land in LA Foodshed (2004-2010)	California Department of Conservation Farmland Mapping and Monitoring Program	Biennial
Acres of grazing land in LA County (2010)	California Department of Conservation Farmland Mapping and Monitoring Program	Biennial
Number of farms in Southern California foodshed[1] (2007)	NASS Census of Agriculture	Every 5 years
Percentage of small farms in LA Foodshed (<180 acre) (2007)	NASS Census of Agriculture	Every 5 years
Percentage of mid-sized farms in LA Foodshed (180-499) (2007)	NASS Census of Agriculture	Every 5 years
Percentage of large farms in LA Foodshed (>500 acres) (2007)	NASS Census of Agriculture	Every 5 years
Median farm size in LA Foodshed (2007)	NASS Census of Agriculture	Every 5 years
Median LA County farm size (2007)	NASS Census of Agriculture	Every 5 years
Value of direct sales in LA Foodshed (2007)	NASS Census of Agriculture	Every 5 years
Number of organic certified farms in LA Foodshed (2007)	NASS Census of Agriculture	Every 5 years
Average number of dairy cows per farm in California (2007)	NASS Census of Agriculture	Every 5 years
Average number of hogs per farm in California (2007)	NASS Census of Agriculture	Every 5 years
Average number of broilers per farm in California (2007)	NASS Census of Agriculture	Every 5 years
Average number of layers per farm in California (2007)	NASS Census of Agriculture	Every 5 years
Number of farms in LA County (2007)	NASS Census of Agriculture	Every 5 years
Land in farms in LA County (2007)	NASS Census of Agriculture	Every 5 years
Total market value of agricultural production in LA County (2007)	NASS Census of Agriculture	Every 5 years
Number of women-operated farms in LA Foodshed (2007)	NASS Census of Agriculture	Every 5 years

Number of minority-operated farms in LA Foodshed (2007)	NASS Census of Agriculture	Every 5 years
Average number of cattle per farm in California (2007)	NASS Census on Agriculture	Every 5 years
Number of farmers' markets in South LA (2013)	LA County Agricultural Commissioner	Monthly
Number of farmers' markets in West LA (2013)	LA County Agricultural Commissioner	Monthly
Number of registered beekeepers in LA County (2013)	LA County Department of Agricultural Weights and Measures	Monthly
% of mobile food vendors graded by LA County Department of Public Health that received an 'A' grade (2013)	LA County Department of Public Health	Monthly
Number of CalFresh participants in LA County (2013)	LA County Department of Public Social Services	Monthly
Number of community gardens in the City of LA (2013)	LA Neighborhood Land Trust	Monthly
Percentage of 4 year old WIC participants that are obese or overweight in LA County (2012)	Public Health Foundation Enterprise (PHFE) WIC Program	Monthly
Percentage of adults that are food insecure in LA County (2011)	UCLA Center for Health Policy Research	Monthly
Number of food system jobs in LA Foodshed (2012)	Quarterly Workforce Indicators Data. Longitudinal-Employer Household Dynamics Program	Quarterly
Number of traditional food trucks operating in LA County (2009)	Asociacion de Loncheros	Unknown
Number of traditional food trucks operating in LA City (2009)	Asociacion de Loncheros	Unknown
Surplus food recovered from farms to food banks in California (2012)	CDFA, California Association of Food Banks	Unknown
Food scraps as a percentage of total waste stream disposed in landfills	City of LA Waste Characterization and	Unknown
in City of LA (2000)	Quantification Study for Year 2000	OTIKTIOWIT
Food scraps sent to landfills or incinerators in City of LA per year (2000)	City of LA Waste Characterization and Quantification Study for Year 2000	Unknown
Tons of food scraps composted in City of LA per year (2000)	City of LA Waste Characterization and Quantification Study for Year 2000	Unknown
Percentage of restaurants in South LA that are fast food (2010)	City of Los Angeles	Unknown
Percentage of restaurants in West LA that are fast food (2010)	City of Los Angeles	Unknown
Number of people served per grocery store in South LA (2008)	Community Health Councils	Unknown
Number of people served per grocery store in West LA (2008)	Community Health Councils	Unknown
LA County cities with designated agriculture zones (2013)	Cultivate LA (UCLA/UCCE)	Unknown
Number of urban agricultural sites* in LA County (2013)	Cultivate LA (UCLA/UCCE)	Unknown
Number of community gardens in LA County (2013)	Cultivate LA (UCLA/UCCE)	Unknown
Number of school gardens in LA County (2013)	Cultivate LA (UCLA/UCCE)	Unknown
Estimated national percentage of produce losses at the farm level (2012)	Food and Agriculture Organization	Unknown
Average living wage for household with two adults & one child in LA Foodshed (2013)	MIT Living Wage Calculator	Unknown
Percent of food wasted across supply chain in U.S. (2011)	National Resources Defense Council	Unknown
Number of grocery stores in South LA (2011)	Network for a Healthy California	Unknown
Number of grocery stores in West LA (2011)	Network for a Healthy California	Unknown
Dollar amount of South LA grocery leakage (2011)	Social Compact	Unknown
Dollar amount of East LA grocery leakage (2011)	Social Compact	Unknown
Number of sidewalk food vendors in LA County (2013)	Urban & Environmental Policy Institute	Unknown
Erosion rate in tons per acre per year on croplands in Pacific region* (2007)	USDA National Resources Conservation Service	Unknown
Erosion rate in tons per acre per year on croplands in the U.S. (2007)	USDA National Resources Conservation Service	Unknown
Food hubs in LA County (2012)	USDA ERS Food Environment Atlas	Varies
Farms with direct sales in LA Foodshed (2007)	USDA ERS Food Environment Atlas	Varies

Appendix D: Data Variables

SOUTH LOS ANGELES AND WEST LOS ANGELES ZIP CODES & NEIGHBORHOODS

The zip codes used in the Retail Food Environment/Street Food portion of the report are drawn from Community Health Council's 2008 "South LA Health Equity Scorecard." Areas that include portions of the City of Los Angeles and unincorporated County areas are followed by "LA/Co."¹

South Los	Angeles Zip Codes & Neighborhoods	West Los	Angeles Zip Codes & Neighborhoods
90001	South LA/Co.	90024	West LA
90002	South LA/Co.	90025	West LA
90003	South LA	90034	West LA
90007	University LA	90035	West LA
90008	Crenshaw LA/Co.	90045	Westchester
90011	University LA	90049	Brentwood
90016	University LA	90056	Culver City/Ladera
90018	University LA	90064	West LA
90037	University LA	90066	Venice/Mar Vista
90043	Crenshaw LA/Co.	90067	West LA
90044	South LA/Co.	90077	Bel Air
90047	South LA/Co.	90210	Beverly Hills
90059	South LA/Co.	90211	Beverly Hills
90061	West Compton LA/Co.	90212	Beverly Hills
90062	University LA	90230	Culver City/Ladera
90220	Compton	90232	Culver City/Ladera
90221	Compton	90263	Malibu
90222	Compton	90265	Malibu
90262	Lynwood	90272	Pacific Palisades
90273	Paramount	90291	Venice/Mar Vista
90301	Inglewood	90292	Venice/Mar Vista LA/Co.
90302	Inglewood	90293	Playa del Rey
90303	Inglewood	90401	Santa Monica
90304	Inglewood (Lennox)	90402	Santa Monica
90305	Inglewood	90403	Santa Monica
90250	Hawthorne	90404	Santa Monica
		90405	Santa Monica

¹ Community Health Councils. (2008). "South LA Health Equity Scorecard." Retrieved from www.chc-inc.org/downloads/South%20LA%20Scorecard. pdf

LIST OF NORTH AMERICAN INDUSTRY CLASSIFICATION SYSTEM (NAICS) CODES FOR FOOD SYSTEM WORKERS¹

Food Production	NAICS Codes
Crop Production	111
Animal Production	112
Fishing, Hunting and Trapping	114
Support Activities for Agriculture and Forestry	115
Food Processing & Agricultural Product Manufacturing	
Animal Food Processing	3111
Grain Milling	3112
Sugar Processing	3113
Fruit and Vegetable Canning	3114
Dairy Product Manufacturing	3115
Animal Slaughtering & Processing	3116
Seafood Processing	3117
Commercial bakeries	311812
Frozen cakes and pastry manufacturing	311813
Cookie, cracker and pasta manufacturing	31182
Tortillas	31183
Bakery Product Manufacturing	
Other Food Processing	3119
Beverage Manufacturing	3121
Tobacco Manufacturing	3122
Ag. Chemical Manufacturing	3253
Ag. Implement Manufacturing	33311
Wholesale, Distribution, Warehousing and Storage	
Grocery and Related Products Wholesale	4244
Farm Product Raw Materials Wholesale	4245
Alcoholic Beverages Wholesale	4248
Farm Supplies Wholesale	42491
Truck Transportation	484
Warehousing and Storage	493
Grocery Stores and Other Retail Food Outlets	
Grocery Stores	4451
Specialty Food Stores	4452
Beer, Wine and Liquor Stores	4453
Retail Bakeries	311811
Restaurants, Catering, Bars and Other Food Service	
Full-service restaurant	7221
Limited-service restaurant	7222
Restaurants and Other Food Services	7225
Specialty Food Service	7223
Drinking Places	7224

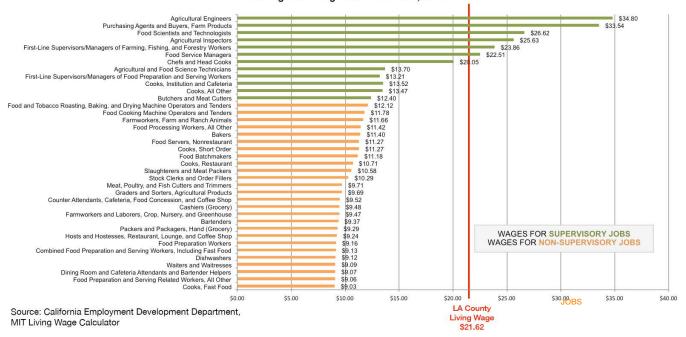
¹ Correspondence with Chris Benner, Associate Professor of Community and Regional Development at the University of California, Davis.(2013)

LIST OF CENSUS AND STANDARD OCCUPATION CLASSIFICATION (SOC) SYSTEM CODES FOR FOOD SYSTEM WORKERS¹

Farmers, ranchers, and other agricultural managers20511-9013Food service managers31011-9051Buyers and purchasing agents, farm products51013-1021Agricultural and food scientists160019-1010Agricultural and food science technicians190019-4011Chefs and head cooks400035-1012Cooks402035-2010First-line supervisors of food preparation and serving workers401035-3011Cooks402035-2010Food preparation workers403035-2021Bartenders404035-3011Contra ettendants, cafeteria, food concession, and coffee shop406035-3021Counter attendants, cafeteria, food concession, and coffee shop406035-3021Vaiters and waitresses411035-3031Food servers, nonrestaurant412035-3041Dising room and cafeteria attendants and bartender helpers413035-9011Diskmashers414035-9021Hosts and hostesses, restaurant, lounge, and coffee shop415035-9031Food perparation and serving related workers, all other416035-9099First-line supervisors of farming, fishing, and forestry workers600045-2011Agricultural inspectors601045-2011Agricultural inspectors605045-2090Fishers and related fishing workers780051-3011Hunters and trappers611045-3011Hunters and rappers611045-3021Bakers<	Occupation 2010 Description	2010 Census Code	2010 SOC Code
Buyers and purchasing agents, farm products51013.1021Agricultural engineers133017-2021Agricultural and food scientists160019.1010Agricultural and food science technicians190019.4011Chefs and head cooks400035.1011Cines supervisors of food preparation and serving workers401035.1012Cooks402035.2010Food preparation workers403035.2021Bartenders404035.3011Counter attendants, cafeteria, food concession, and coffee shop406035.3022Vaiters and waitresses411035.3031Food servers, nonrestaurant412035.3041Dining room and cafeteria attendants and bartender helpers413035.9021Hosts and hostesses, restaurant, lounge, and offee shop415035.9031Food preparation and serving related workers, all other416035.9031Food preparation and serving related workers, all other416035.9031Food preparation and serving related workers, all other416035.9031Food preparation and serving related workers, all other416045.2011Agricultural inspectors601045.2011Agricultural inspectors605045.2021Graders and sorters, agricultural products605045.2021Miscellaneous agricultural workers610045.2011Hunters and related fishing workers610045.3011Hunters and related fishing workers611045.3021Bakers<	Farmers, ranchers, and other agricultural managers	205	11-9013
Agricultural engineers133017-2021Agricultural and food scientists160019-1010Agricultural and food science technicians190019-4011Chefs and head cooks400035-1011First-line supervisors of food preparation and serving workers401035-1012Cooks402035-2010Food preparation workers403035-2021Bartenders404035-3011Combined food preparation and serving workers, including fast food405035-3021Counter attendants, cafeteria, food concession, and coffee shop406035-3022Waiters and waitresses411035-3031Food servers, nonrestaurant412035-3041Dining room and cafeteria attendants and bartender helpers413035-9011Dishwashers414035-9021Hosts and hostesses, restaurant, lounge, and coffee shop415035-9031Food preparation and serving related workers, all other416035-9039First-line supervisors of farming, fishing, and forestry workers600545-1011Agricultural inspectors601045-2011Adimal breeders605045-2021Graders and sorters, agricultural products604045-2041Miscellaneous agricultural workers610045-3011Hunters and related fishing workers780051-3011Hunters and related fishing workers780051-3011Bakers780051-3011Food and tobacco roasting, baking, and drying machine operators rand a	Food service managers	310	11-9051
Agricultural and food scientists160019-1010Agricultural and food science technicians190019-4011Chefs and head cooks400035-1011First-line supervisors of food preparation and serving workers401035-1012Cooks402035-2010Food preparation workers403035-2021Bartenders403035-3011Combined food preparation and serving workers, including fast food405035-3021Counter attendants, cafeteria, food concession, and coffee shop406035-3022Waiters and waitresses411035-3031Food servers, nonrestaurant412035-3041Dining room and cafeteria attendants and bartender helpers413035-9011Dishwashers414035-9021Hosts and hostesses, restaurant, lounge, and coffee shop415035-9031Food preparation and serving related workers, all other416035-9099First-line supervisors of farming, fishing, and forestry workers6001045-2011Agricultural inspectors602045-2021Graders and sorters, agricultural products604045-2041Miscellaneous agricultural workers610045-3011Hunters and related fishing workers611045-3021Bakers780051-3011Buthers and trappers611045-3021Bakers780051-3011Buthers and toher meat, poultry, and fish processing workers781051-3020Food and tobacco rosating, baking, and drying machine opera	Buyers and purchasing agents, farm products	510	13-1021
Agricultural and food science technicians190019-4011Chefs and head cooks400035-1012First-line supervisors of food preparation and serving workers401035-1012Cooks402035-2010Food preparation workers403035-2021Bartenders404035-3011Counter attendants, cafeteria, food concession, and coffee shop406035-3022Waiters and waitresses411035-3031Food servers, nonrestaurant412035-3041Dining room and cafeteria attendants and bartender helpers413035-9011Dishwashers414035-9021Hosts and hostesses, restaurant, lounge, and coffee shop415035-9031Food preparation and serving related workers, all other416035-9099First-line supervisors of farming, fishing, and forestry workers600545-1011Agricultural inspectors602045-2021Graders and sorters, agricultural products604045-3011Miscellaneous agricultural workers610045-2011Miscellaneous agricultural workers780051.3012Bakers780051.3011Buthers and related fishing workers781051.3020Food and tobacco roasting, baking, and drying machine operators784051.3092Food and tobacco roasting, baking, and drying machine operators784051.3092Food batchmakers784051.309250.3031	Agricultural engineers	1330	17-2021
Chefs and head cooks400035-1011First-line supervisors of food preparation and serving workers401035-1012Cooks402035-2010Food preparation workers403035-2021Bartenders404035-3011Combined food preparation and serving workers, including fast food405035-3022Waiters and waitresses411035-3031Food servers, nonrestaurant412035-3041Dining room and cafeteria attendants and bartender helpers413035-9011Dishwashers415035-9021Hosts and hostesses, restaurant, lounge, and coffee shop415035-9031Food preparation and serving related workers, all other416035-9021Animal breeders600545-1011Agricultural inspectors601045-2011Animal breeders605045-2021Graders and sorters, agricultural products604045-3011Hunters and related fishing workers610045-3011Bakers780051-3011Butchers and other meat, poultry, and fish processing workers781051-3020Food batchmakers784051-3092Food batchmakers784051-3092Food batchmakers785051-3093	Agricultural and food scientists	1600	19-1010
First-line supervisors of food preparation and serving workers401035-1012Cooks402035-2010Food preparation workers403035-2021Bartenders404035-3011Combined food preparation and serving workers, including fast food405035-3021Counter attendants, cafeteria, food concession, and coffee shop406035-3022Waiters and waitesses411035-3031Food servers, nonrestaurant412035-3041Dining room and cafeteria attendants and bartender helpers413035-9011Oishwashers414035-9021Hosts and hostesses, restaurant, lounge, and coffee shop415035-9031Food preparation and serving related workers, all other416035-9099First-line supervisors of farming, fishing, and forestry workers600545-1011Agricultural inspectors602045-2021Graders and sorters, agricultural products605045-2011Miscellaneous agricultural workers610045-3011Hunters and trappers611045-3021Bakers780051-3021Bakers780051-3021Food attobacco roasting, baking, and drying machine operators783051-3091Food batchmakers784051-3092Food tocoking machine operators and tenders785051-3093	Agricultural and food science technicians	1900	19-4011
Cooks402035-2010Food preparation workers403035-2021Bartenders404035-3011Combined food preparation and serving workers, including fast food405035-3021Counter attendants, cafeteria, food concession, and coffee shop406035-3022Waiters and waitresses411035-3031Food servers, nonrestaurant412035-3041Dining room and cafeteria attendants and bartender helpers413035-9011Dishwashers414035-9021Hosts and hostesses, restaurant, lounge, and coffee shop415035-9031Food preparation and serving related workers, all other416035-9099First-line supervisors of farming, fishing, and forestry workers600545-1011Agricultural inspectors600145-2011Animal breeders600245-2021Graders and sorters, agricultural products604045-2041Miscellaneous agricultural workers610045-3011Hunters and trappers610045-3011Bakers780051-3011Butchers and other meat, poultry, and fish processing workers781051-3091Food and tobacco roasting, baking, and drying machine operators783051-3092Food batchmakers784051-3092Food cooking machine operators and tenders785051-3093	Chefs and head cooks	4000	35-1011
Food preparation workers403035-2021Bartenders404035-3011Combined food preparation and serving workers, including fast food405035-3021Counter attendants, cafeteria, food concession, and coffee shop406035-3022Waiters and waitresses411035-3031Food servers, nonrestaurant412035-3041Dining room and cafeteria attendants and bartender helpers414035-9011Dishwashers414035-9021Hosts and hostesses, restaurant, lounge, and coffee shop415035-9031Food preparation and serving related workers, all other416035-9099First-line supervisors of farming, fishing, and forestry workers600545-1011Agricultural inspectors601045-2011Animal breeders602045-2021Graders and sorters, agricultural products604045-2041Miscellaneous agricultural workers610045-3011Hunters and trappers611045-3021Bakers780051-3012Butchers and other meat, poultry, and fish processing workers781051-3092Food and tobacco roasting, baking, and drying machine operators and tenders784051-3092Food batchmakers784051-3092Food cooking machine operators and tenders785051-3093	First-line supervisors of food preparation and serving workers	4010	35-1012
Bartenders404035-3011Combined food preparation and serving workers, including fast food405035-3021Counter attendants, cafeteria, food concession, and coffee shop406035-3022Waiters and waitresses411035-3031Food servers, nonrestaurant412035-3041Dining room and cafeteria attendants and bartender helpers413035-9011Dishwashers414035-9021Hosts and hostesses, restaurant, lounge, and coffee shop415035-9031Food preparation and serving related workers, all other416035-9099First-line supervisors of farming, fishing, and forestry workers600545-1011Agricultural inspectors601045-2011Animal breeders602045-2021Graders and sorters, agricultural products604045-2031Hunters and trappers611045-3021Bakers780051-3011Butchers and other meat, poultry, and fish processing workers781051-3020Food and tobacco roasting, baking, and drying machine operators and tenders784051-3091Food batchmakers784051-3092Food batchmakers785051-3092	Cooks	4020	35-2010
Combined food preparation and serving workers, including fast food405035-3021Counter attendants, cafeteria, food concession, and coffee shop406035-3022Waiters and waitresses411035-3031Food servers, nonrestaurant412035-3041Dining room and cafeteria attendants and bartender helpers413035-9011Dishwashers414035-9021Hosts and hostesses, restaurant, lounge, and coffee shop415035-9031Food preparation and serving related workers, all other416035-9099First-line supervisors of farming, fishing, and forestry workers600545-1011Agricultural inspectors601045-2011Animal breeders602045-2021Graders and sorters, agricultural products604045-2041Miscellaneous agricultural workers610045-3011Hunters and trappers611045-3021Bakers780051-3011Butchers and other meat, poultry, and fish processing workers781051-3091Food and tobacco roasting, baking, and drying machine operators and tenders784051-3092Food batchmakers784051-3092Food cooking machine operators and tenders785051-3093	Food preparation workers	4030	35-2021
Counter attendants, cafeteria, food concession, and coffee shop406035-3022Waiters and waitresses411035-3031Food servers, nonrestaurant412035-3041Dining room and cafeteria attendants and bartender helpers413035-9011Dishwashers414035-9021Hosts and hostesses, restaurant, lounge, and coffee shop415035-9031Food preparation and serving related workers, all other416035-9099First-line supervisors of farming, fishing, and forestry workers600545-1011Agricultural inspectors601045-2011Animal breeders602045-2021Graders and sorters, agricultural products604045-2041Miscellaneous agricultural workers610045-3011Hunters and trappers611045-3021Bakers780051-3011Butchers and other meat, poultry, and fish processing workers781051-3091Food and tobacco roasting, baking, and drying machine operators and tenders784051-3092Food batchmakers784051-3092Food cooking machine operators and tenders785051-3093	Bartenders	4040	35-3011
Waiters and waitresses411035-3031Food servers, nonrestaurant412035-3041Dining room and cafeteria attendants and bartender helpers413035-9011Dishwashers414035-9021Hosts and hostesses, restaurant, lounge, and coffee shop415035-9031Food preparation and serving related workers, all other416035-9099First-line supervisors of farming, fishing, and forestry workers600545-1011Agricultural inspectors601045-2011Animal breeders602045-2021Graders and sorters, agricultural products604045-2041Miscellaneous agricultural workers610045-3011Hunters and trappers611045-3021Bakers780051-3011Butchers and other meat, poultry, and fish processing workers781051-3020Food and tobacco roasting, baking, and drying machine operators and tenders784051-3092Food batchmakers784051-3092Food batchmakers785051-3093	Combined food preparation and serving workers, including fast food	4050	35-3021
Food servers, nonrestaurant412035-3041Dining room and cafeteria attendants and bartender helpers413035-9011Dishwashers414035-9021Hosts and hostesses, restaurant, lounge, and coffee shop415035-9031Food preparation and serving related workers, all other416035-9099First-line supervisors of farming, fishing, and forestry workers600545-1011Agricultural inspectors601045-2011Animal breeders602045-2021Graders and sorters, agricultural products604045-2041Miscellaneous agricultural workers610045-3011Hunters and trappers611045-3011Bakers780051-3011Butchers and other meat, poultry, and fish processing workers781051-3091Food and tobacco roasting, baking, and drying machine operators and tenders784051-3092Food cooking machine operators and tenders785051-3093	Counter attendants, cafeteria, food concession, and coffee shop	4060	35-3022
Dining room and cafeteria attendants and bartender helpers413035-9011Dishwashers414035-9021Hosts and hostesses, restaurant, lounge, and coffee shop415035-9031Food preparation and serving related workers, all other416035-9099First-line supervisors of farming, fishing, and forestry workers600545-1011Agricultural inspectors601045-2011Animal breeders602045-2021Graders and sorters, agricultural products604045-2041Miscellaneous agricultural workers605045-2090Fishers and related fishing workers610045-3011Hunters and trappers611045-3021Bakers780051-3011Butchers and other meat, poultry, and fish processing workers781051-3092Food and tobacco roasting, baking, and drying machine operators and tenders784051-3092Food batchmakers784051-3092Food cooking machine operators and tenders785051-3093	Waiters and waitresses	4110	35-3031
Dishwashers414035-9021Hosts and hostesses, restaurant, lounge, and coffee shop415035-9031Food preparation and serving related workers, all other416035-9099First-line supervisors of farming, fishing, and forestry workers600545-1011Agricultural inspectors601045-2011Animal breeders602045-2021Graders and sorters, agricultural products604045-2041Miscellaneous agricultural workers605045-2090Fishers and related fishing workers610045-3011Hunters and trappers611045-3021Bakers780051-3011Butchers and other meat, poultry, and fish processing workers781051-3091Food and tobacco roasting, baking, and drying machine operators and tenders784051-3092Food batchmakers785051-3092	Food servers, nonrestaurant	4120	35-3041
Hosts and hostesses, restaurant, lounge, and coffee shop415035-9031Food preparation and serving related workers, all other416035-9099First-line supervisors of farming, fishing, and forestry workers600545-1011Agricultural inspectors601045-2011Animal breeders602045-2021Graders and sorters, agricultural products604045-2041Miscellaneous agricultural workers605045-2090Fishers and related fishing workers610045-3011Hunters and trappers611045-3021Bakers780051-3011Butchers and other meat, poultry, and fish processing workers781051-3020Food and tobacco roasting, baking, and drying machine operators and tenders784051-3092Food cooking machine operators and tenders785051-3093	Dining room and cafeteria attendants and bartender helpers	4130	35-9011
Food preparation and serving related workers, all other416035-9099First-line supervisors of farming, fishing, and forestry workers600545-1011Agricultural inspectors601045-2011Animal breeders602045-2021Graders and sorters, agricultural products604045-2041Miscellaneous agricultural workers605045-2090Fishers and related fishing workers610045-3011Hunters and trappers611045-3021Bakers780051-3011Butchers and other meat, poultry, and fish processing workers781051-3020Food and tobacco roasting, baking, and drying machine operators and tenders784051-3092Food batchmakers785051-3093	Dishwashers	4140	35-9021
First-line supervisors of farming, fishing, and forestry workers600545-1011Agricultural inspectors601045-2011Animal breeders602045-2021Graders and sorters, agricultural products604045-2041Miscellaneous agricultural workers605045-2090Fishers and related fishing workers610045-3011Hunters and trappers611045-3021Bakers780051-3011Butchers and other meat, poultry, and fish processing workers781051-3020Food and tobacco roasting, baking, and drying machine operators and tenders784051-3091Food batchmakers784051-3092Food cooking machine operators and tenders785051-3093	Hosts and hostesses, restaurant, lounge, and coffee shop	4150	35-9031
Agricultural inspectors601045-2011Animal breeders602045-2021Graders and sorters, agricultural products604045-2041Miscellaneous agricultural workers605045-2090Fishers and related fishing workers610045-3011Hunters and trappers611045-3021Bakers780051-3011Butchers and other meat, poultry, and fish processing workers781051-3020Food and tobacco roasting, baking, and drying machine operators and tenders784051-3091Food batchmakers784051-3092Food cooking machine operators and tenders785051-3093	Food preparation and serving related workers, all other	4160	35-9099
Animal breeders602045-2021Graders and sorters, agricultural products604045-2041Miscellaneous agricultural workers605045-2090Fishers and related fishing workers610045-3011Hunters and trappers611045-3021Bakers780051-3011Butchers and other meat, poultry, and fish processing workers781051-3020Food and tobacco roasting, baking, and drying machine operators and tenders784051-3091Food batchmakers784051-3092Food cooking machine operators and tenders785051-3093	First-line supervisors of farming, fishing, and forestry workers	6005	45-1011
Graders and sorters, agricultural products604045-2041Miscellaneous agricultural workers605045-2090Fishers and related fishing workers610045-3011Hunters and trappers611045-3021Bakers780051-3011Butchers and other meat, poultry, and fish processing workers781051-3020Food and tobacco roasting, baking, and drying machine operators and tenders784051-3091Food batchmakers784051-3092Food cooking machine operators and tenders785051-3093	Agricultural inspectors	6010	45-2011
Miscellaneous agricultural workers605045-2090Fishers and related fishing workers610045-3011Hunters and trappers611045-3021Bakers780051-3011Butchers and other meat, poultry, and fish processing workers781051-3020Food and tobacco roasting, baking, and drying machine operators and tenders783051-3091Food batchmakers784051-3092Food cooking machine operators and tenders785051-3093	Animal breeders	6020	45-2021
Fishers and related fishing workers610045-3011Hunters and trappers611045-3021Bakers780051-3011Butchers and other meat, poultry, and fish processing workers781051-3020Food and tobacco roasting, baking, and drying machine operators and tenders783051-3091Food batchmakers784051-3092Food cooking machine operators and tenders785051-3093	Graders and sorters, agricultural products	6040	45-2041
Hunters and trappers611045-3021Bakers780051-3011Butchers and other meat, poultry, and fish processing workers781051-3020Food and tobacco roasting, baking, and drying machine operators and tenders783051-3091Food batchmakers784051-3092Food cooking machine operators and tenders785051-3093	Miscellaneous agricultural workers	6050	45-2090
Bakers780051-3011Butchers and other meat, poultry, and fish processing workers781051-3020Food and tobacco roasting, baking, and drying machine operators and tenders783051-3091Food batchmakers784051-3092Food cooking machine operators and tenders785051-3093	Fishers and related fishing workers	6100	45-3011
Butchers and other meat, poultry, and fish processing workers781051-3020Food and tobacco roasting, baking, and drying machine operators and tenders783051-3091Food batchmakers784051-3092Food cooking machine operators and tenders785051-3093	Hunters and trappers	6110	45-3021
Food and tobacco roasting, baking, and drying machine operators and tenders783051-3091Food batchmakers784051-3092Food cooking machine operators and tenders785051-3093	Bakers	7800	51-3011
and tenders783051-3091Food batchmakers784051-3092Food cooking machine operators and tenders785051-3093	Butchers and other meat, poultry, and fish processing workers	7810	51-3020
Food cooking machine operators and tenders785051-3093		7830	51-3091
	Food batchmakers	7840	51-3092
Food processing workers, all other 7855 51-3099	Food cooking machine operators and tenders	7850	51-3093
	Food processing workers, all other	7855	51-3099

*Red text designates supervisory workers

Appendix E: Wages of Food System Workers in LA County



Supervisory and Non-Supervisory Median Wages by Occupation Los Angeles - Long Beach - Glendale, 2013

24 MIT Living Wage Calculator provides a minimum estimate for the cost of living for a household with two adults and one child in Los Angeles County, 2013, Retrieved from http://livingwage.mit.edu/counties/06037



