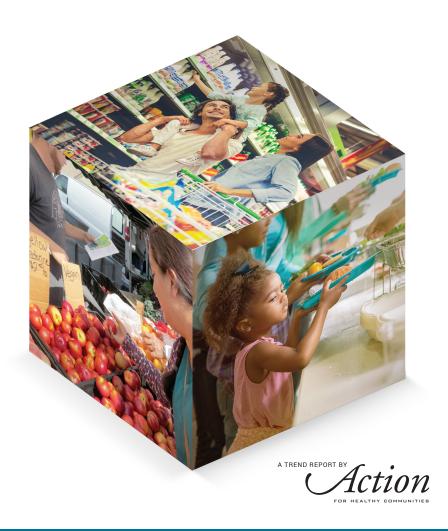
# VITALSIGNS

UNDERSTANDING SAN LUIS OBISPO COUNTY



ACTION for Healthy Communities is a consortium of public, private, and non-profit organizations that collaborate to assess the quality of life in San Luis Obispo County. The goals of the project are to raise public awareness, provide accurate and reliable data, improve decision-making, establish community goals, and develop collaborative action plans to achieve those community goals.

ACTION for Healthy Communities began collecting key datasets about quality of life issues in the county in 1999, with updates completed in 2001, 2003, 2006, 2010, 2013 and 2016. The 2016 project includes a telephone survey of a representative sample of 1,109 San Luis Obispo County residents. The term "residents" will be used to describe data from those telephone survey respondents. The overall study also includes a face-to-face survey with homeless individuals and Spanish-speaking parents. These primary data pieces have been combined with data from a wide range of federal, state and local sources to bring you a picture of life in San Luis Obispo County.

The full report may be found at http://ActionSLO.org.

## INTRODUCTION

San Luis Obispo County (SLO County) is famous for its vibrant farmers' markets, robust wines, rolling hills, beautiful coasts, and strong rural character. With grapes, strawberries, avocados, and more than a hundred other crops grown in the county, along with cattle and seafood production, the county's food system plays an important role in shaping the economic, environmental, and social health of the Central Coast.

In 2016, SLO County's total gross crop value was \$914,724,000, an increase of 10% from the previous year, despite continued challenges caused by ongoing drought, poor water quality, and labor shortages. Yet, more than 46,000 people a year in SLO County find themselves hungry. To be a community where all can thrive, we must sustain a food system that supports farmers and fosters economic development and resilience, while expanding access to healthy foods for low-income people and families.

## WHAT IS A FOOD SYSTEM?

The term "food system" is the path from farm to fork. The food system includes every step and process necessary to feed people: growing, harvesting, processing, packaging, transporting, marketing, consuming and disposing of food and food packaging.<sup>3</sup> This system operates within and is influenced by social, political, economic and natural environments. Each step is also dependent on human resources that provide labor, research and education.<sup>3</sup>

This folio provides an overview of SLO County's dynamic food system. It is organized by the four major elements of the SLO County Food System Coalition's vision: *profitability, equitability, health promotion, and resiliency.* <sup>4</sup> It describes trends, challenges, and opportunities. It is intended to provide a common framework to inform policymakers, residents, and advocates, providing strategies for moving forward to inspire action across the county.

## **PROFITABILITY**

Exploring the profitability of our local food system means examining a complex system related to efficiencies in production, processing, and distribution.

In 2016, the State of California, with \$2.9 billion in direct farm sales, was responsible for 33% of the total for all US farm sales.<sup>5</sup> The state also leads the country in the number of farms selling food directly to consumers, retailers, and institutions, with more than 14,315 farms engaged in direct sales.<sup>5</sup>

As of 2015, SLO County ranked 16th in the state for overall agricultural production value.<sup>6</sup> In 2016, crop values continued to thrive, despite ongoing challenges related to the

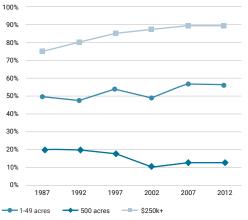
drought. The county's leading crops in 2016 remained wine grapes and strawberries, with wine grapes shattering records, bringing in \$242,900,000, a 66% increase from 2015.¹ Conversely, cattle production was dramatically impacted by the drought and continued to struggle, with a 24% reduction compared to 2015, the lowest sales since 1928.¹

Table 17. Top 10 Crops in Value, SLO County

#	Сгор	\$ Value	%
1	Wine Grapes all	242,900,000	26.55%
2	Strawberries	241,282,000	26.38%
3	Avocados	44,628,000	4.88%
4	Broccoli	43,878,000	4.80%
5	Cattle and Calves	39,984,000	4.37%
6	Vegetables Transplants	34,195,000	3.74%
7	Cut Flowers	29,547,000	3.23%
8	Head Lettuce	19,582,000	2.14%
9	Cauliflower	16,334,000	1.79%
10	Lemons	16,008,000	1.75%
	All Other Crops	186,386,000	20.38%

The total number of producers in SLO County has recently tapered off after a period of consistent growth. In 2012 the total number of farms was recorded at 2,666, down 4% from 2007.<sup>8</sup> The average farm size in acres has increased slightly from 492 to 502

Figure 1. Small and large acreage farms as percent of total farms, and large revenue farms as a percent of all farm values, including direct sales, 1987-2012



Source: USDA, Census of Agriculture

acres, though smaller farms are growing at a faster rate.<sup>8</sup> However, the increasing number of small-acreage farmers are not able to keep up with the financial dominance of large revenue farms.

The USDA reported that small family farms accounted for the majority (58%) of direct-to-consumer sales in the nation by providing their products at farmers markets, roadside farm stands, and through community supported agriculture (CSA) programs.<sup>5</sup> In SLO County,

direct-to-consumer sales grew substantially between 1992 to 1997,8 but since 1997 the percentage of farms with direct sales has been decreasing, despite an increase in engagement in direct-to-consumer activities, like farmers' market sales, and an increase in the number of farms with direct sales.8 Direct sales as a percent of total agricultural sales also decreased over the same period, while sales increased both nationally and in California.8

These trends highlight the importance of increasing infrastructure and distribution capacity for small farms in SLO County to improve profitability.

## **EQUITABILITY**

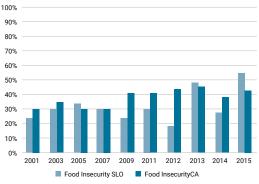
An equitable food system ensures that all residents have access to affordable and healthy food, and that food system employees are fairly compensated. We currently have an inequitable food system that disproportionately burdens low-income and marginalized groups.

The USDA<sup>o</sup> defines food security for a household as "access by all members at all times to enough food for an active, healthy life" and food insecurity as "the limited or uncertain availability of nutritionally adequate and safe foods or limited or uncertain ability to acquire acceptable foods in socially acceptable ways."

Every day in SLO County, people struggle to afford food to feed both themselves and their families. While a small sample size limits our ability to generalize, over the last decade the percentage of residents reporting that they were not able to afford enough food has been increasing. In 2015, 54% of SLO County residents whose income was less than 200% of the Federal Poverty Level reported that they were not able to afford enough food, up from 27% in 2014.¹¹ To meet this growing need, The Food Bank Coalition of SLO County has increased its food distribution to nearly 6 million pounds of food in 2016,² more than double what it was in 2006.¹¹

Regrettably, while food insecurity has increased, many eligible families are not applying for food benefits via CalFresh (formerly known as the Food Stamp Program). In SLO County, 60% of residents eligible for CalFresh are not enrolled. 12 The county ranks at the bottom of all California counties –39 out of 40.13 California as a whole ranks second to last in the nation. 13 In SLO County there are 26,361 Income-Eligible residents

Figure 2. Low-income adults reporting inability to afford enough food



Source: California Health Interview Survey

not enrolled in the CalFresh Program.<sup>12</sup> This not only hurts the families who need it, but also deprives the county of an estimated \$31.8 million in direct federal benefits, money that could be spent on food at many farmers' markets and grocery stores. This would increase overall economic activity in the county by approximately \$56.9 million annually,<sup>13</sup> bringing a possible bump in profitability to small farmers, as well as other local businesses (See Table 2).

Table 2. SLO County CalFresh Enrollment

SLO CalFresh Opportunity				
CalFresh Participants Enrolled	17,542			
Income-Eligible Residents <i>Not</i> Enrolled	26,361			
Additional Economic Activity w/ Full CalFresh Participation	\$56,900,000			

Inequity also exists within the job market that employs food system workers. These jobs often involve poor labor conditions and low hourly wages with no benefits. In SLO County, food system employees working in the food preparation and serving related occupations (\$11.72), and those in the farming, fishing, and forestry fields (\$11.52) have some of the lowest median hourly wages of all jobs in the SLO labor market. The median sales price of homes in the county in 2016 was \$480,000<sup>15</sup> and the average cost for a two-bedroom rental was \$1,310 per month. This makes it difficult for workers to subsist.

Trends in low wages and food insecurity go hand in hand and emphasize the importance of providing fair compensation to workers at all levels of the labor market to promote a thriving economy.

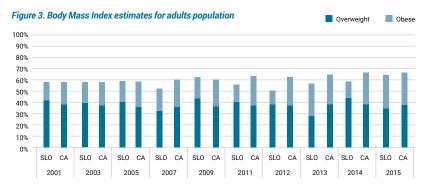
# PROMOTING HEALTH

A food system promotes physical and mental health by providing access to safe, fresh, affordable, local food so residents can make healthier food choices.<sup>17</sup> A dysfunctional food system will produce negative health outcomes.

Before the 1950s, the national food system was mostly localized. Today, much of our food system has become globalized. Today's food system incentivizes quantity over quality, cheap food over healthier food.<sup>18</sup>

Poor nutrition is associated with an increased risk of chronic disease. In the current food system, caloric overconsumption is the primary diet-related risk factor for developing a number of serious and deadly diseases, from cardiovascular disease (CVD), diabetes and obesity to cancer.<sup>19</sup> The rate of chronic disease, such as diabetes or obesity, in a community can indicate how well a food system is promoting health. While SLO County was recently ranked 7th in the nation for the number of happiest,

healthiest residents,<sup>20</sup> it still faces the same issues as the state with the obesity epidemic. For example, in 2015, the overall rate of adult diabetes was 5.4%, up from 3.5% in 2013, yet still far below the state average of 9.8% in 2015.<sup>10</sup> And for the same year, research showed that 60.4% of SLO County adults were overweight or obese, just under the state average of 63%.<sup>10</sup> (See Figure 3)



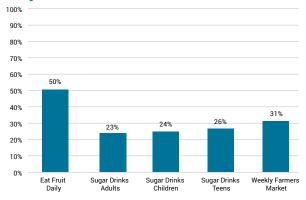
Source: California Health Interview Survey

How does food access promote health and prevent disease? Studies show that food-insecure and low-income people are at heightened risk for obesity. These individuals often face multiple barriers to accessing healthful affordable food (e.g., fruits and vegetables) and may live in neighborhoods with more unhealthful food options. An increased availability of processed and fast foods, which tend to have higher calories, lower nutritional value, and more added sugar and/or fats (e.g., cheeseburgers, fries, snacks, sodas, juice, etc.), has been linked to higher rates of obesity. This is compounded for people who regularly go hungry because they go through cycles of food deprivation and overeating.

SLO County has made great strides to increase access to healthy foods and decrease food insecurity. As of 2015 there were 62 (75%) salad bars and 59 (73%) school gardens in the 80 schools in SLO County, <sup>4</sup> and as of summer 2017, there are 19 farmers' markets operating, one on every day of the week throughout the county, <sup>7</sup> of which at least two accept CalFresh as payment.

Yet, the recent Vital Signs report highlights the need to expand this work. Only half (50%) of ACTION (2016)<sup>25</sup> telephone survey respondents reported that on average they eat five or more servings of fruits and vegetables every day. Parents also reported daily consumption of soda or other sugary drinks at least 23% of the time.<sup>25</sup> And only 31% of respondents visited a local farmer's market at least once a week.<sup>25</sup>

Figure 4. Percentage of SLO County adults/parents reporting daily consumption of 5+ servings of fruit, daily consumption of soda or other sugary drinks, and visiting a local farmer's market at least once/week



Source: 2016 Action for Healthy Communities Survey (n=153-1.110)

These trends demonstrate that SLO County is strugaling with many of the same obesity-related health and economic issues as other areas of the state. As a community. SLO County residents are performing better in kev health indicators. However, equity issues still exist, making healthy food choices difficult for many living in the county.

### RESILIENCY

A resilient local food system ensures that there are opportunities for future generations of farmers, ranchers and fisherfolk through the conscious and careful use of our natural resources.<sup>17</sup>

Citizens, agricultural producers, and policymakers have long recognized the importance of agriculture in SLO County and how land use choices impact the entire community. The availability and affordability of land for agricultural production in SLO County directly affects the ability of the food system to grow food for future generations. In the most recent Vital Signs survey, 74% of SLO County adults report being concerned about conversion of agricultural lands to urban and built-up uses. <sup>25</sup>

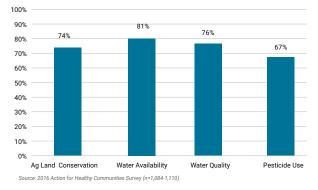
While it is not unusual for land-use to shift over time, the future viability of agricultural production in the county depends on preserving land designated for agricultural purposes. An analysis of recent local farmland conversion rates between 1992 and 2006 show a decrease in agricultural land (grazing and farm land). Farmland has traditionally been preserved through the Williamson Act. New enrollments may be an indicator of stability in the local agricultural economy. Statewide, reported participation peaked in 2004 with enrollment decreasing over the last 10 years. This is likely due to the end of the fiscal support which encouraged enrollment in 2010. Despite these issues, in 2012 SLO County was among the leading California counties with enrollment increases. SLO County reported 1,580 acres of new enrollments in 2012, and 1,345 acres of new enrollments in 2013. These numbers demonstrate that farmland continues to be preserved in SLO County.

How we manage our water and soil resources also directly impacts the resilience of our food system. In addition to water availability, the use of pesticides, fertilizers, and

animal waste impacts the quality of surface and groundwater. To ensure healthy soil and water for future generations, we must protect these resources.

Between 2012 to 2014, six out of 14 groundwater basins reached severity level III in their water supply system, signifying water demand exceeded supply or their water system had reached capacity. In the most recent VITAL SIGNS survey, 25 water was the top environmental concern. Many respondents reported that they are "very" or "somewhat" concerned about the availability and quality of our water supply. The recent severe drought conditions have resulted in a majority of residents (53.5%) saying that they are "very" concerned about water availability, with another 27.4% saying they are "somewhat" concerned. 25 In the North County, residents reliant on the Paso Robles groundwater basin are in severe danger of not having water for either agricultural or residential use by 2025. 4

Figure 5. Percentage of SLO County adults "very" or "somewhat" concerned about environmental issues



Nitrate contamination, from both urban and agricultural sources, is a challenge in many communities. One of the most common groundwater contaminants in rural areas, nitrate, is regulated in drinking water primarily because excess levels can cause methemoglobinemia,

or "blue baby" disease.<sup>28</sup> Nitrates in groundwater originate primarily from fertilizers, septic systems, and manure storage or spreading operations and can affect local lakes, rivers and streams. Four out of the seven SLO County creeks and rivers have nitrate levels measuring above the California drinking water standard of 10mg/L.<sup>4</sup>

Reducing pesticide use is another important component of a resilient food system. Two-thirds (66%) of SLO County residents reported in Vital Signs being concerned about pesticide use. <sup>25</sup> In 2012, 2.8 million gross pounds of pesticides were reportedly used on the top crops in SLO County. <sup>29</sup> Excessive use of toxic chemicals in agricultural production can pollute air, soil, and water, <sup>17</sup> and it has been estimated that of applied pesticides, only 0.1% actually reach the target pests, with the bulk of the pesticide (99.9%) being shed in the environment. <sup>30</sup>

Food loss and waste is also a growing problem in our modern society. In 2014 alone, more than 38 million tons of food waste was generated, with only five percent diverted from landfills and incinerators. The EPA estimates that more food reaches landfills

and incinerators than any other single material in our everyday trash, constituting 21.6 percent of discarded municipal solid waste.<sup>31</sup> The greenhouse gas emissions generated by the decomposition of organic material in landfills is considered a significant contributor to climate change. Reducing the amount of organic material sent to landfills is the focus of the California Global Warming Solutions Act of 2006 and is one of its strategies for reaching a 75 percent statewide recycling goal. Collecting and processing organic materials, particularly food, is also the focus of CA AB 1826, with mandated efforts starting in April 2016.<sup>32</sup>

Clearly then, a resilient food system must be able to adapt and thrive in the face of challenges like a changing climate and varying water and energy supplies. The biggest challenge SLO County's food system currently faces is how it will adapt to climate change. A report issued by the County Planning and Building Department acknowledges that climate change could result in significant effects on the Central Coast including rising temperatures, decrease in water supply, and shifts in seasonal transitions. The report shows that projected annual average temperatures across SLO County are expected to increase between 2.1 and 3.9 degrees Fahrenheit by 2045 and between 4.1 to 7.6 degrees Fahrenheit by 2085. Together these climate changes have the potential to affect our region's natural environment, decrease crop yield and quality, reduce food security, and hurt our local economy, including the tourism industry.

Despite these significant challenges, SLO County has several important strengths. A long-supported agricultural industry has fostered robust relationships with the community, maintains a high crop diversity, growing more than one hundred different crops. These strengths will help keep agricultural production in the county sustainable in times of crisis

# THE FUTURE

What can we do as a community to strengthen our food system?

#### ADVOCATE FOR FARM-TO-SCHOOL PROGRAMS.

These programs provide students with equal access to local healthy foods as well as educational opportunities, such as how to make informed food choices, cooking lessons, school gardens, and farm field trips, all while strengthening the local economy by purchasing from small farmers.

#### SUPPORT GOVERNMENT FOOD PROGRAMS.

This will have a mutually beneficial outcome—providing financial benefit to farmers, reducing food insecurity, and promoting healthy eating habits among low-income families. To achieve this, first we must increase the usage of CalFresh EBT payment at SLO County farmers' markets by securing more opportunities for Market Match, California's healthy food incentive program, which matches customers' federal

nutrition assistance benefits at farmers' markets. Second, CalFresh program enrollment should be increased through added outreach and a simplified application process that removes barriers to participation.

#### PROMOTE AGRICULTURAL CAREERS.

As the average age of farmers across the country continues to rise, the County could implement programs to attract and assist beginning farmers and ranchers to restore these fields as viable career options for the next generation of producers who will need to step up to farm SLO County's rich land and nourish us into the future.

## SUSTAINABLE MANAGEMENT OF FOOD.

Encourage jurisdictions, organizations and residents in SLO County to engage in the sustainable management of food through food waste prevention, surplus food donation, and food recycling techniques, such as composting, while expanding the organics recycling infrastructure.

#### INFRASTRUCTURE INVESTMENT.

Finally, greater leadership from local government and private investment in our SLO County Food System Coalition infrastructure would bring more stakeholders to the table, generating innovative support for programs that enhance local food markets.

- San Luis Obispo County Department of Agriculture/Weights and Measures. 2016 Crop Report Media Release. (2017).
- Food Bank of San Luis Obispo County. Community Impact Report. Food Bank of San Luis Obispo County (2017). Available at: www.slofoodbank.org/our-impact.php. (Accessed: 15th July 2017)
- 3. Cornell University. Discovering the Food System (A Primer on Community Food Systems: Linking Food, Nutrition and Agriculture). (2008).
- 4. Goldberg, A. & Feenstra, G. Assessing the San Luis Obispo County Food System. (Central Coast Grown, U.C. Davis Agricultural Sustainability Institute and U.C. Sustainable Agriculture Research and Education Program, 2014).
- 5. United States Department of Agriculture (USDA). 2012 Census of Agriculture. Direct Farm Sales of Food Highlights. (2016).
- California Department of Food and Agriculture (CDFA). California Agricultural Statistics Review. (2015).
- San Luis Obispo County Department of Agriculture/Weights and Measures. 2016 Annual Crop Report San Luis Obispo County. (2015).
- United States Department of Agriculture (USDA), National Agricultural Statistics Service (NASS). Census of Agriculture. (2012). Available at: www.nass.usda.gov/ Statistics\_by\_State/California/index.php. (Accessed: 16th July 2017)
- United States Department of Agriculture, Economic Research Service.
  Measurement. (2016). Available at: https://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us/measurement/. (Accessed: 23rd July 2017)
- UCLA Center for Health Policy Research. AskCHIS (California Health Interview Survey). AskCHIS (California Health Interview Survey) (2003). Available at: ask.chis.ucla.edu/AskCHIS/tools/\_layouts/AskChisTool/home.aspx#/results. (Accessed: 16th July 2017)
- 11. Hansen, C. Food Distributed by the Food Bank Coalition of San Luis Obispo County. (2013).
- CalFresh. Data Dashboard. (2015). Available at: www.cdss.ca.gov/inforesources/ Data-Portal/Research-and-Data/CalFresh-Data-Dashboard. (Accessed: 17th November 2017)
- County Profiles | California Food Policy Advocates. Available at: cfpa.net/countyprofiles. (Accessed: 16th July 2017)
- United States Department of Labor, Bureau of Labor Statistics. San Luis
   Obispo-Paso Robles-Arroyo Grande, CA. Metropolitan, and Nonmetropolitan Area
   Occupational Employment and Wage Estimates. (2016). Available at: www.bls.gov/
   oes/current/oes\_42020.htm#35-0000. (Accessed: 19th July 2017)
- National Association of Home Builders (NAHB). 2010-2016 NAHB, Wells Fargo Housing Opportunity Index (HOI), 1st Quarter. (2016).
- U.S. Department of Housing and Urban Development. HUD USER Data Sets, 2010-2016. (2016).
- 17. Hammer, C. Central Coast Foodshed Guide. (2015)

- 18. Cho, R. Rethinking Our Food System to Combat Obesity. State of the Planet (2011).
- Committee on a Framework for Assessing the Health, E. et al. Health Effects of the U.S. Food System. in A Framework for Assessing Effects of the Food System. (National Academies Press (US), 2015).
- Doust, L. San Luis Obispo is 7th in the U.S. for well-being. The San Luis Obispo Tribune (2017).
- 21. Seligman, H. K., Laraia, B. A. & Kushel, M. B. Food Insecurity Is Associated with Chronic Disease among Low-Income NHANES Participants. J. Nutr. 140, 304–310 (2010)
- Nesheim, M. C. et al. Health Effects of the U.S. Food System. (National Academies Press (US), 2015).
- Segal, L. M., Rayburn, J. & Martin, A. The State of Obesity: Better Policies for a Healthier America. (Trust for America's Health and Robert Wood Johnson Foundation, 2016).
- 24. Food Research & Action Center (FRAC). Why Low-Income and Food-Insecure People are Vulnerable to Poor Nutrition and Obesity. Food Research & Action Center (n.d.). Available at: frac.org/obesity-health/low-income-food-insecurepeople-vulnerable-poor-nutrition-obesity. (Accessed: 25th July 2017)
- ACTION for Healthy Communities. Vital Signs-Understanding San Luis Obispo County. (2016).
- 26. California Department of Conservation. 2015 California Farmland Conversion Report. (2015).
- Stats Reports Williamson Act Program Reports and Statistics. Available at: www. conservation.ca.gov/dlrp/lca/stats\_reports/Pages/Index.aspx. (Accessed: 3rd August 2017)
- 28. PSEP :: Fact sheets :: Nitrate: Health Effects in Drinking Water. Available at: psep. cce.comell.edu/facts-slides-self/facts/nlt-heef-grw85.aspx. (Accessed: 15th November 2017)
- PAN Pesticide Info for San Luis Obispo. Available at: pesticideinfo.org/DCo. jsp?cok=40. (Accessed: 3rd August 2017)
- Horrigan, L., Lawrence, R. S. & Walker, P. How sustainable agriculture can address the environmental and human health harms of industrial agriculture. Environ. Health Perspect. 110, 445–456 (2002).
- US EPA, O. Wasted Food Programs and Resources Across the United States. US EPA (2016). Available at: epa.gov/sustainable-management-food/wasted-food-programs-and-resources-across-united-states. (Accessed: 15th November 2017)
- Recovery (CalRecycle), C. D. of R. R. and. Organic Materials Management: CalRecycle. Available at: calrecycle.ca.gov/organics/. (Accessed: 15th November 2017)
- County of San Luis Obispo. Energywise Plan: Designing Energy and Climate Solutions for the Future. (2011).

STATUS OF CHILDREN IN SLO COUNTY

