# TABLE OF CONTENTS

I. EXECUTIVE SUMMARY ................................................................................................................... 2

II. SAN DIEGO COUNTY F2S TASKFORCE .................................................................................. 4

III. METHODOLOGY ......................................................................................................................... 5

IV. F2S: DEFINITION, CONTEXT, AND BENEFITS ........................................................................ 6

V. SURVEY FINDINGS ....................................................................................................................... 9
   San Diego County Schools and Agriculture: An Overview............................................................ 9
   The Business of School Food: Operations and Food Purchasing .............................................. 10
   Produce Distribution ...................................................................................................................... 12
   Defining Local Foods..................................................................................................................... 13
   Local Foods Purchasing................................................................................................................ 14
   Farm to School Programming........................................................................................................ 15
   Shared Local Foods Procurement Initiatives .............................................................................. 17
   Needs ............................................................................................................................................ 19

VI. ADVANCED ANALYSIS ............................................................................................................. 19
   Multi-Year Growth of Farm to School in San Diego County ....................................................... 19
   Farm to School Taskforce Members vs. Non-members ............................................................... 21
   Researcher’s Corner: Farm to School Index ............................................................................... 23

VII. RECOMMENDATIONS ............................................................................................................ 25

VIII. ENDNOTES .............................................................................................................................. 27

IX. APPENDIX A - SAN DIEGO F2S RESOURCE GUIDE ........................................................... 29

X. APPENDIX B– GOOD FOOD SHOWCASE ............................................................................. 32
I. EXECUTIVE SUMMARY

San Diego County Farm to School is a proven success

Defined as the combination of school gardens, food-based education, and local foods procurement in a school setting, Farm to School (F2S) has grown rapidly across the nation. The F2S movement has aligned and fed off the growing good food movement on a national scale. The San Diego County Farm to School Taskforce (F2S Taskforce), facilitated by Community Health Improvement Partners (CHIP), has been leading the regional growth in F2S throughout the County since its inception in 2010.

F2S is receiving increased recognition as an innovative set of strategies to improve academic achievement, child nutrition, and holistic child development. In parallel with increasing evidence for the benefits of F2S, research is mounting that shows the positive impacts of local foods on our health, local economies, and the environment. This is particularly relevant for San Diego County, as it is home to over 4,200 small farms, more than any other county in the country. From an economic standpoint, San Diego is the 12th largest county agricultural economy in the country, valued at $1.7 billion.

This fourth annual State of Farm to School in San Diego County report provides a comprehensive analysis of San Diego County school districts’ 2015-2016 F2S activities. Given that we now have a few years of comprehensive San Diego F2S data, this report provides not only F2S analyses of the 2015-2016 school year, but also comparative analyses across school years. Of the many results, the three provided below stand out to showcase San Diego’s F2S growth over the past few years.

School districts have reported nearly 500% growth in local food purchases from 2013-2014 to 2015-2016, or $3.1m to $17.7m.

The number of school gardens has increased by 18% (214 to 252) from 2014-2015 to 2015-2016, and by 40% over the last three school years.

The number of school districts reporting local purchases increased from 60% to 82% of respondents from 2014-2015 to the 2015-2016 school year.
Though signs are encouraging, there are still major challenges in growing the movement. School district food service representatives reported “competitive pricing” and not having a “single ordering method” for growers as the top two challenges procuring from local farms.

The report also furthers support of the value of a collective impact model for F2S, providing evidence of a strong correlation between F2S Taskforce involvement and a greater engagement of F2S activities. The evidence in this report suggests that the F2S Taskforce could be a national model for how to support and guide the growth of F2S as a region.

Recommendations are provided at the end of the report (pg. 25) for growers, distributors, and school districts to grow the San Diego F2S movement further, taking into consideration the current San Diego food systems landscape. These recommendations will inform the strategies and activities of the F2S Taskforce over the coming year.

The expansion of F2S in San Diego County has coincided with a large and growing number of F2S support organizations in the region. With so many providing support, it is difficult at times for school district staff to navigate organizations and maximize their benefits in building district F2S activities. To ease the burden, this report provides a small, concise San Diego F2S Resources Guide in Appendix A to assist school district food service and nutrition professionals to continue their promotion and support of local, healthy, sustainable foods.

**CONTRIBUTORS**
Writers: Prem Durairaj, Colin Cureton
Data Analyst: Colin Cureton
Data Collection and Editor: Elizabeth Vaughan
Designer: Donna D’Angelo

**CONTACT**
Community Health Improvement Partners
5095 Murphy Canyon Road, Suite 105
San Diego, CA 92123
(858) 609-7962
II. SAN DIEGO COUNTY F2S TASKFORCE

The mission of the San Diego County F2S Taskforce is to increase consumption of local, healthful, seasonal foods and to improve food literacy within schools.

The F2S Taskforce started in 2010 as a subcommittee of the San Diego County Childhood Obesity Initiative’s (COI) Schools and After-school Domain workgroup. For more than 10 years, the COI has used a collective impact model to reduce and prevent childhood obesity in San Diego County through policy, systems, and environmental change. Community Health Improvement Partners (CHIP) serves as a “backbone organization” to facilitate the COI and the F2S Taskforce. As a backbone organization, CHIP manages the collective structure to empower stakeholders to plan, coordinate, and support collaborative initiatives to solve complex health problems in San Diego County.

In 2016, the F2S Taskforce had 33 member organizations consisting of 20 school districts and institutional buyers, six local food and farm businesses, and six community partners. F2S Taskforce members are defined as any entity that participates in three or more of the F2S Taskforce’s key activities or meetings per year. Beyond those qualifying for membership, roughly 80 different entities directly participated in the F2S Taskforce in 2016 including 39 school districts and dozens of community partners, local growers, distributors, and food businesses.
III. METHODOLOGY

In the fall of 2016, CHIP and the F2S Taskforce conducted their fourth annual State of Farm to School in San Diego County survey. All data collected is for the 2015-2016 school year. A total of 34 out of 42 school districts responded, a response rate of 81%. The 34 school districts that responded accounted for 96% of all students in the County. Data generated by CHIP was merged with other publicly available data sets on school meal participation rates, free and reduced-price meal eligibility, student enrollment and demographics, etc.

The SY15-16 survey was designed to be highly consistent with last year’s survey, thus many two-year comparisons are made throughout the report. There is also a multi-year analysis section that looks at three- and four-year trends for a limited set of data points. The survey tool is not included in this report but is available upon request.
IV. F2S: Definition, Context, and Benefits

According to The National Farm to School Network (NFSN), F2S includes strategies that enrich the connection communities have with fresh, healthy food and local food producers by changing food purchasing and education practices at schools, early child care, and education sites. F2S programs vary greatly but always include one or more of the following elements:

- **Procurement**: Local foods are purchased, promoted and served in the cafeteria or as a snack or taste-test.
- **Education**: Students participate in educational activities related to agriculture, food, health or nutrition.
- **School gardens**: Students engage in hands-on learning through gardening.

According to the 2015 USDA Farm to School Census, in the 2013-2014 school year 5,254 districts representing 42,857 schools engaged in F2S activities in the U.S. These districts spent $789M on local and regional foods, generating over $1B in local economic activity, and have over 17,000 salad bars and 7,000 school gardens. California accounted for over 20% of total national local and regional foods purchasing ($167M). Simply put, F2S has taken root around the country, and California is a national leader in the F2S movement.

F2S is in many ways a response to a series of interrelated health, social, environmental, and economic challenges, one being childhood obesity. Since 1980, childhood obesity rates for children ages 2-19 have tripled until recently leveling off at roughly 17%. Obese children are at greater risk for a range of chronic health conditions such as type 2 diabetes, asthma, and risk factors for heart disease. These children are also more likely to become obese adults and suffer from serious related health issues including heart disease, diabetes, metabolic syndrome, and cancer. Social and emotional impacts include greater likelihood of being bullied and experiencing social isolation, depression, and low-self-esteem.

While nationwide increases have tapered off in recent years, childhood obesity rates remain dangerously high and, furthermore, wide disparities exist. For example, in 2011-2014 the national childhood obesity rate was 21.9% among Hispanic children and 19.5% among non-Hispanic black children compared 14.7% for non-Hispanic white children. According to the 2016 State of Childhood Obesity report, these disparities are slightly more pronounced in San Diego County, with a 2014-2015 childhood obesity rate of 23.1% for Hispanic students and 8.9% for white students among 5th, 7th, and 9th graders. Similarly, 29.9% of economically disadvantaged students were obese in San Diego County in the same year versus 10% of non-economically disadvantaged students. These stark statistics suggest there is much work yet to be done to make sure all children have equal opportunity for health and well-being.
Figure 1: Childhood overweight and obesity among San Diego County 5th, 7th, and 9th graders, White versus Hispanic students (SY2014-2015)

Source: California Department of Education, FITNESSGRAM® body composition test

Figure 2: Childhood overweight and obesity among San Diego County 5th, 7th, and 9th graders, economically disadvantaged (E.D.) students versus non-E.D. students (SY2014-2015)

Source: California Department of Education, FITNESSGRAM® body composition test
A contributing factor to the growth in childhood obesity and other diet-related disease is a food system gone awry. The U.S. food supply does not come close to providing the mix of foods necessary for Americans to meet the present federal dietary guidelines. Instead, roughly 60% of all calories consumed in the U.S. come from “ultra-processed foods,” which account for 90% of our energy intake from added sugars. F2S seeks to counter this trend, offering freshly prepared meals using nutritious, local/regional foods and complementary educational activities in cafeterias, classrooms, gardens, and more.

More broadly, the food system lies at the intersection of our health, economy, environment, and well-being. Thus diet-related health issues like childhood obesity are intertwined with everything from food security to climate change to rural economies and more. Through its diverse set of strategies, F2S is a school-based platform for addressing the many challenges facing students, schools, farmers, and communities.

There are numerous demonstrated and potential benefits of F2S. A recently updated publication from the NFSN entitled The Benefits of Farm to School provides an exhaustive review of the research demonstrating the impact of F2S. Broadly, these benefits include:

- **Education**: Improving student academic achievement and engagement of students, educators, and parents.
- **Health**: Improving student nutrition behaviors, knowledge, attitudes, and access.
- **Economic Development**: Creating jobs, bolstering farmer and producer incomes, and driving local/regional economic activity.
- **Environment**: Supporting sustainable agriculture, reducing food waste, and more.
- **Community engagement**: Increasing community awareness, acceptance of healthier school meals, and opportunities to address inequities.

For access to all related research and citations, see the NFSN brief. Also, for a detailed analysis on the benefits of local and regional foods, see the 2015 State of Farm to School Report.

It is worth noting that research on the drivers of F2S and its long-term impacts is still in its infancy. For example, preliminary research has found that a number of factors significantly influence F2S participation at the school level including the supply of local food, school size, percent of students on free or reduced cost meals, federal reimbursements for the cafeteria programs, total school system expenditures, food cost, cafeteria sales, county population, race composition, and urbanicity. USDA is asking similar questions to better understand the common characteristics of schools that offer local foods daily. Another preliminary study is dedicated to understanding how local agricultural conditions influence school districts’ local food purchasing. Finally, a recent issue of Choices, a publication of the Agriculture & Applied Economics Association, featured several exploratory articles including “Do farm-to-school programs create local economic impacts?” and “School gardens may combat childhood obesity.” This all suggests that the volume and quality of research of F2S are only going to improve in the coming years.
With this solid understanding of the definition, context, and benefits of F2S, the remainder of this report focuses on the current activities, trends, developments, challenges, and opportunities of San Diego County’s F2S movement.

V. Survey Findings

San Diego County Schools & Agriculture: An Overview

The context for F2S in San Diego County is a school system comprised of 42 public school districts consisting of 739 schools with a total enrollment in SY15-16 of 497,012 students. About half (51%) of these students were eligible for free or reduced price meals in SY15-16. Roughly half of all students (48%) report Hispanic ethnicity and another 21% are non-Hispanic, non-White minorities. Thus roughly 330,000 students or 70% of all students in the County are racial or ethnic minorities. While important nuances exist, research broadly demonstrates that low-income, African-American, Hispanic, and American-Indian populations are at a greater risk for food insecurity and/or childhood overweight and obesity. This context reinforces the importance of San Diego County’s school meal programs in ensuring students’ academic success, food security, health, and well-being.
Agriculture in San Diego County presents unique opportunities to the region’s school districts and other institutional buyers seeking to partner with local producers and feature local foods. The County is a national leader in the number of small farms, organic farms, and farms with women as a principal operator. In terms of agricultural products, the County is the #1 producer in avocados, #2 in guavas, limes, and pomegranates, #3 in honey, and #9 in strawberries, among others. It is the 12th largest county farm economy in the U.S., with a $1.7B production value in 2015 ($320M of which consisted of fruits, vegetables, and nuts). This production generated over $5B in value to the economy. Importantly, San Diego County has a year-round growing season producing a wide variety of crops. San Diego County’s F2S and broader good food movement have the opportunity to put the region’s agricultural bounty to work in a way that benefits people’s health, farmer’s livelihoods, the local economy, and the environment.

The Business of School Food: Operations and Food Purchasing

A crucial component of any district’s F2S program is the procurement of fresh, nutritious, locally and regionally-sourced foods. In order to most effectively accomplish this goal, F2S advocates need a sharp understanding of the business, management, logistics, and policies that govern school food. The complexities of these dynamics within a single district, much less across a region, should not be underestimated. The following section presents a brief overview of the operations, infrastructure,
Whether or not school nutrition professionals have access to robust kitchen infrastructure is a key determinant in their ability to procure, prepare, and serve local and regional foods in freshly prepared meals. In 2015-2016, responding district food service operations were comprised of 249 production kitchens, 371 satellite kitchens, and 191 drop sites. Notably, the number of reported satellite kitchens is up 11% from SY14-15 (despite a lower survey response rate) suggesting that San Diego County schools’ capacity to cook may be slowly increasing. Similarly, the number of districts that reported extensive capacity to freshly prepare meals increased from three in the previous year to seven in SY15-16.

However, much work remains. Roughly 40% of respondents still reported limited or no capacity to freshly prepare meals, and 65% reported limited to no capacity to process produce. The number of
schools with salad bars (492) remained roughly unchanged from previous years. Another finding consistent with last year is the diversity of approaches to menu planning across districts, ranging from one- to seven-week cycles, to seasonal, to as needed.

In SY15-16, San Diego County school districts collectively spent:

- $71.8M on food overall
- Just below $12M on produce
- $10M through US Department of Agriculture (USDA) Commodity Foods
- Over $750,000 through Department of Defense (DOD) Fresh

Just as enrollment and demographics reinforce the opportunity of San Diego County’s meal programs to support student health and well-being, the collective food budgets of these districts reinforce the opportunity to invest public resources in ways that support the local economy, health, and environmental sustainability.

**Produce Distribution**

San Diego County’s public school districts continue to mostly rely on local and regional produce distributors. For about 80% of respondents, the primary provider for produce is one of three produce distributors: American Produce, Sunrise Produce, and Diamond Jack.

<table>
<thead>
<tr>
<th>Distributor</th>
<th># of Districts</th>
<th>% of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sunrise Produce</td>
<td>12</td>
<td>35%</td>
</tr>
<tr>
<td>American Produce</td>
<td>8</td>
<td>24%</td>
</tr>
<tr>
<td>Diamond Jack</td>
<td>7</td>
<td>21%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>27</strong></td>
<td><strong>79%</strong></td>
</tr>
</tbody>
</table>

Other primary distributors used by districts include A&R, Smart and Final, Sysco, and Costco. Secondary sources of produce cited include USDA, DOD, Goldstar, Food for Thought, and several local farms including Eden Tropics, Sage Mountain Farms, Old Grove Orange, Wynola Flats, and even one district farm (FarmLab in Encinitas).

San Diego County school district distributors vary in size, from local and regional businesses (e.g., American, Sunrise, Diamond Jack) to large national distributors (e.g., Sysco, Goldstar). These distributors also continue to show varying degrees of engagement with the region’s F2S efforts. CHIP applauds and appreciates the engagement of these businesses in meeting districts’ demand for local and regional produce, and asks for their continued efforts to partner with districts, local growers, and the broader F2S community to regionalize and increase transparency in their supply chains.
Defining Local Foods

The San Diego County F2S Taskforce has adopted a three-tiered definition of “local” as food grown, raised, or produced:

- In San Diego County (Tier 1)
- Within 250 miles of San Diego County (Tier 2)
- In California (Tier 3)

The F2S Taskforce “local” definition is designed to prioritize food grown in San Diego County (Tier 1), but incorporates aspects of other common definitions of “local” (e.g., within a certain mile radius, state level) and allows for a greater volume and range of products at competitive prices to be considered in districts’ efforts to source local.
Local Foods Purchasing

Perhaps the single most important finding from this year’s survey is the steep increase in reported local foods purchasing among San Diego County school districts. The 34 responding districts reported purchasing $17.7M in local foods in 2015-2016, a 160% increase from the previous year. Accompanying this finding, the number of districts that reported purchasing any local foods is up from 24 last year to 28 in 2015-2016, or from 60% to 82% of respondents.

This growth in local foods purchasing comes after a more than doubling the previous year, from $3.1M in 2013-2014 to $6.9M in 2014-2015 (a 120% increase). Thus from the baseline 2013-2014 local food purchasing figure, reported local foods purchasing has increased nearly six-fold in the past three years. School local foods purchasing has also increased rapidly around the country, so the upward trend is no surprise. According to USDA between the 2011-2012 and 2013-2014 school years, local food purchasing increased by 105%,xii While not a direct comparison, San Diego County’s six-fold local foods purchasing increase between SY13-14 and SY15-16 is even more impressive given the benchmark of a national doubling the preceding two years.

San Diego County schools’ SY15-16 local foods purchasing accounts for 25% of districts’ collective food budget. Within this $17.7M, districts purchased a reported $6.1M of local produce, accounting for more than 50% of all produce purchased. This data point sums up the impact of the monumental collaborative efforts of San Diego County school districts, distributors and food businesses, local growers, and F2S advocates over the past six years to bring more local and regional foods to students’ plates. The fact that two-thirds ($12M) of total local food purchasing was spent on non-produce food items also demonstrates an emerging maturity to the region’s F2S work, as the region’s early F2S work focused mostly on local produce.

Several dynamics likely contributed to this steep increase in local foods purchasing, including:

1. Continued F2S collaboration among districts, local farms, distributors, and food businesses, and San Diego’s broader and growing good food movement.
2. Rapid expansion of programs promoting freshly-prepared, California-sourced meals (i.e. California Thursdays®, detailed below on pg. 17).
3. Improved tracking in the food supply chain and among districts.

Given that the F2S Taskforce’s definition of local foods includes foods grown in California, and that California growers produce a third of all vegetables and two-thirds of all fruit consumed in the U.S., it is likely that prior local foods purchasing in the County was much higher than reported. Anecdotally, CHIP’s work with produce distributors over the past several years suggests that these businesses are slowly but surely responding to their customers’ demands for greater transparency in understanding where and how their food is grown. While tracking, labeling, and reporting systems are still in their infancy among most districts and distributors, several distributors serving schools now can and do regularly produce reports for their clients on produce origins. While the food system still has a long way to go in becoming thoroughly transparent, CHIP considers this increased tracking and transparency an important, complimentary success.

F2S Programming

A total of 29 out of 34 responding districts (85%) led some type of F2S programming, which is the same rate as last year. The top F2S activities in the County are as follows (including number of districts and percent of responding districts):

- F2S in the cafeteria (24 districts, 71% of respondents)
- Smarter Lunchrooms principles (18 districts, 53% of respondents)
- Working with distributor to source local (17 districts, 50% of respondents)
- Local food marketing (14 districts, 41% of respondents)
- F2S education in the classroom (12 districts, 35% of respondents)
- F2S after-school programming (12 districts, 35% of respondents)
Other less common F2S activities include districts having F2S goals or plan (8), having farm connections (7), appointing a F2S staff lead (6), offering F2S community programming (6), having cafeteria food coaches (5), and setting a local foods budget (2).

Relative to the previous school year, the prevalence of these F2S activities varies and may signal shifts toward some F2S strategies and away from others. The following table shows which F2S activities have become more and less common, and by what percentage of respondents:

<table>
<thead>
<tr>
<th>More common F2S activities in SY15-16</th>
<th>Less common F2S activities in SY15-16</th>
</tr>
</thead>
<tbody>
<tr>
<td>• F2S after-school programming (+22%)</td>
<td>• F2S goals/plans (-11%)</td>
</tr>
<tr>
<td>• Smarter Lunchrooms strategies (+20%)</td>
<td>• Local foods budget (-9%)</td>
</tr>
<tr>
<td>• F2S in the cafeteria (+18%)</td>
<td>• Garden programming (-8%)</td>
</tr>
<tr>
<td>• F2S in the classroom (+10%)</td>
<td>• Work with distributor to source local (-8%)</td>
</tr>
</tbody>
</table>

Given that there is some variation between the two years’ sample size and characteristics, these differences should not be taken as definitive trends. However, they can (with cautious interpretation) provide insight. For example, steep growth in Smarter Lunchrooms is a logical result of community partners’ intensive efforts to expand this program the past few years. Similarly, the increased prevalence of F2S in the classroom and cafeteria signals the continuing maturation of the region’s F2S collaboration, and the intensive growth in 2015-16 of shared procurement initiatives like California Thursdays®.
Shared Procurement Initiatives

CHIP uses the term ‘shared procurement initiative’ to encompass regional and statewide programs that promote and support local foods purchasing and F2S-related education. These programs are often developed and housed by third party entities (e.g., nonprofits, local government) and offer curriculum, programming, training, staff support, capacity building, and technical assistance to participating districts. Shared procurement initiatives have proven to be an excellent way to provide districts the tools they need to grow F2S within a district, and to grow a F2S movement across a region or state.

Harvest of the Month

For a number of years, the Harvest of the Month (HOTM) program has been an important shared procurement initiative in the region. HOTM is an initiative of the California Department of Public Health that features nutrition education tools and resources to support healthy lifestyle habits. In the cafeteria, HOTM involves procuring and promoting local, seasonal fruits and vegetables using a shared HOTM calendar and, in the classroom, engages students through curriculum-based experiential nutrition education. In San Diego County, HOTM has been implemented by a long-time F2S Taskforce member and community partner, University of California San Diego’s Center for Community Health. Through a long-running innovative partnership, UCSD leads the direct implementation of HOTM and CHIP supports districts’ HOTM local food procurement needs and provides an ongoing platform for regional collaboration through the F2S Taskforce. HOTM has been critical to growing and solidifying San Diego County’s F2S movement through using shared strategies, language, and curriculum. For example, the program has helped school districts communicate shared messages to their produce distributors about their priority of purchasing local produce, and providing a shared purchasing calendar for a defined set of items.

In SY15-16, 19 districts reported implementing some aspect of HOTM. A majority (12) implement aspects of HOTM informally without direct support from UCSD, and seven report implementing HOTM with the support of UCSD. The independent adoption of the program by almost twice as many districts as those receiving formal support is a testament to the program’s successes. Similarly, reports that a number of produce vendors now provide support on seasonal produce marketing is yet another success of the program. Compared to last year in which 11 districts formally and nine informally implemented HOTM, SY2015-16 survey results suggest that, 1) Districts may be shifting toward more informal implementation, and 2) The growth of HOTM in the region may be plateauing. The shift toward self-implementation can be considered a success in which districts are taking up the baton to lead this program within their district independent of direct support from a third party organization.

California Thursdays®

Another important shared procurement initiative in the region, and throughout the state, is California Thursdays®. California Thursdays® is a collaboration between the Center for Ecoliteracy and a network of public school districts to serve healthy, freshly prepared school meals made from California-grown food. The program has built a statewide network to support school nutrition
leaders with the resources, tools, training, and support needed to serve more freshly-prepared, California-sourced meals.

In the 2014-2015 school year, the California Thursdays® program was in its second year of statewide expansion. The network itself was small, with only five participating districts in San Diego County. At the beginning of the 2015-2016 school year, CHIP established a partnership with the Center for Ecoliteracy to leverage the network and infrastructure of the F2S Taskforce to drive a concentrated regional expansion of the program in San Diego County. This effort was highly successful, with program participation in the County jumping from 5 to 12 in the first half of the 2015-2016 school year.

In San Diego County, the California Thursdays® Collective Impact Network gathered several times over the course of the year. This included a training for the statewide California Thursdays® network hosted in San Diego County, several gatherings in conjunction with the F2S Taskforce, and an annual white tent event at San Diego’s Waterfront Park on the program’s statewide collection action day. This latter event featured remarks by San Diego County policymakers, advocates, and practitioners and, most importantly, invited the more than 100 attendees to sample freshly-prepared, California-sourced recipes from over half a dozen local participating districts. This event, and accompanying events within participating districts on the same day, garnered regional and local press coverage in the San Diego Union Tribune and other local papers.

Overall, the rapid growth of California Thursdays® has supported participating districts to take their efforts preparing and serving fresh, local foods to the next level, helping to bring hundreds of thousands of freshly-prepared, California-sourced meals to San Diego County students in 2015-16. It also brought new resources and energy to the region, amplified the network of districts leading this work in San Diego County, and helped districts communicate their individual and collective message more effectively to local stakeholders and policymakers. The Center for Ecoliteracy’s work is only getting started, and CHIP looks forward to continued growth, success, and partnership with the Center for Ecoliteracy and this innovative statewide network.
Needs

Similar to previous years, this year’s F2S survey asked districts their top five needs for purchasing more local foods. In 2015-16, these included the need for:

- Competitive pricing (19 districts, 56% of respondents)
- A single ordering method (13 districts, 38% of respondents)
- Better information on availability of local foods (11 districts, 32% of respondents)
- Availability of lightly processed products (8 districts, 24% of respondents)
- A greater variety of available products (8 districts, 24% of respondents)

Notably, four of these top five needs are the same as last year, suggesting that similar barriers to increased local purchasing persist. These top five needs also roughly correlate to districts’ top concerns.

VI. ADVANCED ANALYSIS

This section includes a more advanced analysis of the State of F2S Survey results, including:

- A three-year analysis
- F2S Taskforce members versus non-F2S Taskforce members
- A section on CHIP’s F2S Index.

Multi-year Growth of F2S in San Diego County

CHIP’s annual survey of school districts provides the opportunity to look at the growth and evolution of F2S in the region over multiple years. While many two-year comparisons are made earlier in the report, this brief section summarizes key trends over the last three years, from 2013-14 to 2015-16.

Most notably, over the past three school years, reported local foods purchasing has increased nearly six-fold. The following figure summarizes increasing local foods purchasing.
This steep growth is even more impressive given that survey sample size decreased from 42 districts in 2013-14, to 40 districts in 2014-15, and 34 districts in 2015-16, suggesting a strong likelihood the local procurement increase is even higher than reported.

During this same time period, the number of F2S activities per district nearly tripled from 1.5 to 4.5. This suggests that districts in the region are, on average, diversifying their approach to F2S activities in cafeterias, classrooms, gardens, communities, and through their business practices. Lastly, over these three school years the total number of school gardens increased 40%.

The data suggests a snowball effect, with the rate of growth toward F2S activities increasing from year to year.
F2S Taskforce Members vs. Non-members

This section examines the 20 school districts that were F2S Taskforce members in 2015-16 and compares them in a variety of ways to non-member districts. Comparing the two groups is valuable because it helps put in context the size, scope, and impact of F2S Taskforce member districts, and considers the value of school districts working collaboratively through the F2S Taskforce.

First, it is important to note that the 20 F2S Taskforce member districts account for a majority of students, meals served, and dollars spent in the County. While these 20 districts account for just under half of the County’s 42 districts, they tend to be the larger districts in the region. As a snapshot, the 20 member districts served a combined 53,908,466 meals, represent 595 schools, and enroll 429,236,236 students.

As a whole, the F2S Taskforce member districts represent 90% of all San Diego County schools’ meals served, 80% of all schools, and 85% of total enrollment. Member districts are, on average, statistically significantly larger by enrollment and more diverse by race/ethnicity (more specifically, having a higher percentage of Hispanic students) than non-member districts.

Out of the 20 member districts, 19 responded to the State of F2S Survey and 15 out of 22 non-member districts responded. Comparing the survey responses of each group allows for a detailed understanding of how the F2S activities vary between the two groups. When it comes to purchasing local foods, 95% of all local foods and 99% of all local produce purchases were made by F2S Taskforce members. With respect to local foods purchasing, F2S Taskforce member districts were statistically significantly more likely to:

- Purchase any local produce
- Purchase any local food
- Prioritize local foods and/or F2S in their produce contract
- Dedicate a higher portion of their overall produce budget to local produce

Notably, despite these findings, F2S Taskforce members did not have statistically significantly higher average per meal food costs in 2015-16 than non-Taskforce members.

F2S Taskforce members also stand out when it comes to scope and intensity of F2S activities. For example, F2S Taskforce members account for 87% of all salad bars and 83% of school gardens in the County. They are significantly more likely to conduct any F2S activities, and to conduct more F2S activities (about twice as many activities on average) than non-Taskforce members. Members were also significantly more likely to participate in California Thursdays® than non-members. This is no surprise, given the intentional partnership between the Center for Ecoliteracy and CHIP.

In summary, this analysis shows that the F2S Taskforce is an influential group in San Diego County, both in terms of size (i.e. schools, budgets, and students) and in local foods purchasing and F2S activities. It is important to note that this analysis does not in any way indicate causality (i.e., F2S Taskforce participation is causing greater F2S activity).
F2S Taskforce Members
San Diego County school districts SY2015–16

...are a large, influential group
• In SY2015–16, the 20 school districts that were F2S Taskforce Members served 453,908,466 meals to 595 schools serving 429,236 students. This is just over 90% of meals, 85% of students, and 80% of schools in the county.
• In San Diego County, F2S Taskforce Members account for roughly 99% of all local produce purchasing, 95% of all local foods purchasing and 85% of salad bars and school gardens
• 11 out of 12 districts that reported participating in CA Thursdays were F2S Taskforce Members.

...had more active and robust F2S activities
F2S Taskforce Members were more likely to:
• Conduct any F2S** activities
• Conduct more F2S (about twice as many different F2S activities on average)***
• Participate in CA Thursdays***

...were more active in local food purchasing
F2S Taskforce Members were more likely to:
• Buy any local produce*** and any local food**
• Use the F2S Taskforce definition of local foods***
• Prioritize local foods in their produce contract***
• Dedicate a higher portion of their produce budget to local foods***

Notably, despite all this, F2S Taskforce Members do not have significantly higher average per meal food costs

***p<.01, **p<.05, *p<.1
Researcher’s Corner: Farm to School Index

In the 2014-2015 State of Farm to School in San Diego County report, CHIP introduced a new metric for measuring and tracking school districts’ F2S programs: the Farm to School Index (F2S Index). The F2S Index is a balanced measure that combines the prevalence of local foods purchasing, nutrition education, and school gardens within a district. The measure is also normalized, meaning that it can compare districts of varying size on the same scale. This ensures that small and medium-sized districts’ robust F2S programs do not get overlooked by virtue of their smaller size.

**How It Works**

- The F2S Index uses a 0 to 1 scale in which districts scoring “1” represent the most active, robust F2S program.
- The F2S Index is made up of three subcomponents, one for each of the three prongs of F2S: local foods procurement, nutrition education, and school gardens.
- The F2S Index is a relative measure in which the maximum score in each sub-component is established by the highest performer in each sub-component.

CHIP believes the F2S Index can be a useful evaluation tool for F2S advocates and researchers as they seek to better measure F2S activity and track its growth across communities, regions, states, and across the country.

**In 2015-16, the average F2S Index was .33, an increase from the 2014-15 average of .26.** While this may seem to be a nominal increase over the baseline 2014-15 figure, *this represents a 27% increase in the region’s average F2S Index*. Figures 4 and 5 on the next page demonstrate districts’ F2S Index distribution over the two years. The 2015-16 figure is notably more of a smooth, normal distribution with several high performing outliers. The 2014-15 distribution is more erratic, with a distribution peak in the same decile of .2-.299, but also a cluster of districts near zero and a steep drop off at .4. Thus, the 2015-16 figure demonstrates with the more objective F2S Index measure what the preceding analysis has shown that F2S is growing across the board in the region.
Source: 2014-15 and 2015-16 CHIP San Diego F2S Surveys
VII. RECOMMENDATIONS

This section provides recommendations for school districts, growers, and distributors, on what is needed to further grow the F2S movement, with an emphasis on local procurement. Recommendations are based on F2S survey data, along with an understanding of the local F2S movement developed since the inception of the F2S Taskforce in 2010.

Recommendations for School Districts

- **Continue increasing capacity for in-house cooking to facilitate greater use of local product and counteract the dearth of processing facilities in the region.** As mentioned in the earlier “Business of School Food” section, in-house cooking capacity is increasing within school districts. This increase allows more and more schools to meet their needs for “lightly processed products” (pg. 11).

- **Commit to using the common F2S Taskforce definition of “local.”** Not only does a unified definition allow for better County reporting, but it also allows for more productive local sourcing requests to distributors. Unifying buyer support around a common “local” definition will lead distributors to adjust their source “local” labeling and provide better supply chain reports to buyers.

- **Consider forward contracting with growers.** Forward contracting provides small farmers a better opportunity to plan growing schedules to meet institutional demand when farm capacity constraints normally limit these opportunities. This allows for more potential local sources for product at high volume.

- **Focus on seasonal products to ensure cost effective local procurement.** Resources such as CHIP’s Crop Availability Report\[xiii\] can support efforts to identify local, seasonal product. The Crop Availability Report provides valuable local grower crop availability information tailored to San Diego school district needs. The 2017 Crop Availability Report is expected by August of 2017.

- **Use the F2S Taskforce resource guide to support districts’ F2S efforts.** Given the various means of grown a school district’s F2S activities, working with support organizations to bolster these efforts is a worthwhile endeavor. The resource guide provided in Appendix A is created to make the connection between school district and F2S support organization easier to manage.

- **Participate in the F2S Taskforce.** The group has a great deal of experience in making F2S happen as well as streamlined access to knowledge, resources, community partners, and relationships with food and farm businesses that can be mobilized to help school districts grow their F2S program.

Recommendations for Growers

- **Build capacity through food hubs or other methods that can combine product, increase efficiency, improve service, and control prices.** Given the large number of small farmers in San Diego County, it is imperative that collaborative ideas are considered in both reducing costs through economies of scale and expanding the potential market space for each business.
- **Take advantage of opportunities to expand knowledge about the institutional market.** A partnership with an institution can streamline grower sales to one regular (seasonal or year-round) buyer, fetch a fair price for your products, and be an excellent marketing opportunity for your farm. However, understanding whether the institutional market is a good fit is important.

- **Understand institutional buyers’ language, purchasing process, and needs, and create a plan to meet those needs.** CHIP provides annual Farm to Institution 101 trainings covering these topics.

**Recommendations for Distributors**

- **Strengthen business practices with regard to local sourcing and source identification.** School districts’ demand for local foods is here to stay and will only increase over time. Geographic preference in competitive produce bids will soon be the norm rather than the exception.
VIII. ENDNOTES

i National Farm to School Network, About Farm to School, accessed in June, 2017 at http://www.farmtoschool.org/about/what-is-farm-to-school.


xii Botkins E, Roe B, Understanding participation in the USDA’s farm to school program: Results integrating information from the Farm to School Census and the Census of Agriculture, paper presented at the 2015 Agricultural and Applied Economics (AAEA) & Western Agricultural Economics Association’s (WAEA) Joint Annual Meeting (July, 2016), accessed in July, 2017 at http://ageconsearch.umn.edu/handle/206229.


xxiv San Diego Farm Bureau, San Diego County agriculture facts, accessed in June, 2017 at [https://www.sdfarmbureau.org/SD-Ag/Ag-Facts.php](https://www.sdfarmbureau.org/SD-Ag/Ag-Facts.php).

IX. APPENDIX A - SAN DIEGO COUNTY F2S RESOURCE GUIDE

The following resource guide includes a number of local, state, and national resources that can help grow and sustain school districts’ F2S programs. The guide is organized into the three pillars of F2S: procurement, education, and school gardens.

### Procurement

*Local foods are purchased, promoted and served in the cafeteria.*

<table>
<thead>
<tr>
<th>Member Resource/Support</th>
<th>What they do/provide</th>
<th>Contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>CA Department of Food and Agriculture’s Office of Farm to Fork</td>
<td>Platform to connect farmers, producers and schools. Resources on CA seasonality and available produce.</td>
<td><a href="http://www.cafarmermarketplace.com">www.cafarmermarketplace.com</a></td>
</tr>
<tr>
<td>Community Health Improvement Partners</td>
<td>Technical support on bid language, crop availability charts, connections to local farms, mediated sales support</td>
<td><a href="mailto:evaughan@sdchip.org">evaughan@sdchip.org</a> / 858-609-7978 or <a href="mailto:pdurairaj@sdchip.org">pdurairaj@sdchip.org</a> / 858-609-7962 <a href="http://www.sdchip.org">www.sdchip.org</a></td>
</tr>
<tr>
<td>Community Alliance with Family Farmers</td>
<td>Technical support on local procurement, food safety, etc.</td>
<td><a href="http://www.caff.org/programs/fts/farm-to-school">www.caff.org/programs/fts/farm-to-school</a></td>
</tr>
<tr>
<td>Good Food Showcase</td>
<td>CHIP’s annual event to connect local farms and good food producers with institutional buyers including schools</td>
<td><a href="http://www.sdchip.org">www.sdchip.org</a> for more information</td>
</tr>
<tr>
<td>School Food Focus</td>
<td>Statewide support agency on large scale procurement change and policy</td>
<td><a href="http://www.schoolfoodfocus.org">www.schoolfoodfocus.org</a></td>
</tr>
</tbody>
</table>

### Education

*Students participate in educational activities related to agriculture, food, health, or nutrition.*

<table>
<thead>
<tr>
<th>Member Resource/Support</th>
<th>What they do/provide</th>
<th>Contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Center for Ecoliteracy – California Thursdays® program</td>
<td>Technical support systems change by improving children’s health, education, and the state’s economy while teaching students where food comes from and how it reaches the table.</td>
<td><a href="http://www.californiathursdays.org">www.californiathursdays.org</a></td>
</tr>
<tr>
<td>Member Resource/Support</td>
<td>What they do/provide</td>
<td>Contact</td>
</tr>
<tr>
<td>-------------------------</td>
<td>--------------------------------------------------------------------------------------</td>
<td>--------------------------------------------</td>
</tr>
<tr>
<td>Dairy Council of California</td>
<td>Nutrition education resources for schools and teachers</td>
<td><a href="http://www.healthyeating.org">www.healthyeating.org</a></td>
</tr>
<tr>
<td>San Diego Food Systems Alliance</td>
<td>Food Waste and Reduction Initiative</td>
<td><a href="http://www.sdfsa.org/savethefoodsd">www.sdfsa.org/savethefoodsd</a></td>
</tr>
<tr>
<td>Smarter Lunchroom Movement</td>
<td>Technical support to schools to build a lunchroom environment that makes healthy food choices the easy choice</td>
<td><a href="http://www.smarterlunchrooms.org">www.smarterlunchrooms.org</a></td>
</tr>
<tr>
<td>UCSD Center for Community Health</td>
<td>Harvest of the Month programming, educational materials, support, policy</td>
<td><a href="https://ucsdcommunityhealth.org">https://ucsdcommunityhealth.org</a></td>
</tr>
</tbody>
</table>

**School Gardens**

*Students engage in hands-on learning through gardening.*

<table>
<thead>
<tr>
<th>Member Resource/Support</th>
<th>What they do/provide</th>
<th>Contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good Neighbor Gardens</td>
<td>Management with school gardens and support</td>
<td><a href="http://www.goodneighborgardens.com">www.goodneighborgardens.com</a></td>
</tr>
<tr>
<td>Master Gardeners</td>
<td>School garden support and resources</td>
<td><a href="http://www.mastergardenerssandiego.org">www.mastergardenerssandiego.org</a></td>
</tr>
<tr>
<td>Resource Conservation District</td>
<td>Education programs and school/community gardens</td>
<td><a href="http://www.rcdsandiego.org">www.rcdsandiego.org</a></td>
</tr>
<tr>
<td>San Diego Community Garden Network</td>
<td>Community garden support and mentoring</td>
<td><a href="http://sdcgn.org">http://sdcgn.org</a></td>
</tr>
<tr>
<td>Solana Center</td>
<td>Composting and garden workshops, curriculum and resources</td>
<td><a href="http://www.solanacenter.org">www.solanacenter.org</a></td>
</tr>
<tr>
<td>Victory Gardens San Diego</td>
<td>Garden curriculum and manuals</td>
<td><a href="http://www.victorygardenssandiego.com">www.victorygardenssandiego.com</a></td>
</tr>
</tbody>
</table>

**Other; policy, access to data, etc.**

*Additional resource hubs for farm-to-school stakeholders.*

<table>
<thead>
<tr>
<th>Member Resource/Support</th>
<th>What they do/provide</th>
<th>Contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>CA Farm-to-School Network</td>
<td>Statewide support network expanding and supporting farm-to-school across California</td>
<td><a href="http://www.cafarmtoschool.org">www.cafarmtoschool.org</a></td>
</tr>
<tr>
<td>---------------------------</td>
<td>---------------------------------------------------------------------------------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>San Diego County Childhood Obesity Initiative</td>
<td>Tools for schools, wellness policy language, healthy fundraising, etc.</td>
<td><a href="http://ourcommunityourkids.org">http://ourcommunityourkids.org</a></td>
</tr>
<tr>
<td>Healthy Works – Live Well San Diego, County HHSA</td>
<td>County-funded programs and interventions on healthy eating, school wellness, etc.</td>
<td><a href="http://www.healthyworks.org">www.healthyworks.org</a></td>
</tr>
<tr>
<td>National Farm to School Network</td>
<td>Information, advocacy and networking hub for F2S stakeholders</td>
<td><a href="http://www.farmtoschool.org">www.farmtoschool.org</a></td>
</tr>
<tr>
<td>San Diego Hunger Coalition</td>
<td>Research, education, and advocacy on ending hunger in San Diego County.</td>
<td><a href="http://www.sandiegohungercoalition.org">www.sandiegohungercoalition.org</a></td>
</tr>
<tr>
<td>USDA</td>
<td>Grants, resources, support</td>
<td><a href="http://www.fns.usda.gov/farmtoschool/farm-school">www.fns.usda.gov/farmtoschool/farm-school</a></td>
</tr>
</tbody>
</table>
X. APPENDIX B – GOOD FOOD SHOWCASE

One event important to the region’s F2S work is the Good Food Showcase (formerly the Let’s Go Local! Produce Showcase). The 2015-16 event was CHIP’s third annual Showcase.

The Showcase was initially organized in 2013 as the institutional demand for connecting with local farms increased. School districts wanted to support and buy from local farms but they had difficulty learning which farms were interested in selling their produce. The event now serves as CHIP’s cornerstone annual gathering, bringing together stakeholders and growing the local food economy. The Showcase accomplishes this by connecting school districts and other large institutional buyers with growers of fresh, healthy, local produce and other sustainable food producers, who are exhibitors at the event. By fostering the market in which these buyers and sellers interact face-to-face, CHIP sets the stage for profitable and sustainable business relationships that help grow a healthy community, economy, and food system.

The third annual Showcase was held on October 23, 2015 at Coastal Roots Farm in Encinitas, CA. Over 200 attendees representing more than 40 produce-purchasing institutions and over 50 community partners attended the event to meet an impressive array of nearly 50 Showcase exhibitors. The exhibitors included 37 local farms and food producers, three produce distributors, and eight educational partners.

According to a 2015 Good Food Showcase follow-up survey, buyers reported purchasing $80,550 in local and sustainable foods as a result of their attendance at the Showcase. Given that each dollar invested in F2S stimulates an additional $0.60-$2.16 in economic activity¹, purchases resulting from the 2015 showcase generated an additional $48,330-$173,988 in local economic impact. Exhibitors reported identifying 16 new business opportunities, and a majority of attendees reported that they “established or strengthened valuable business and community relationships” at the event.

The annual Good Food Showcase has become the premier regional gathering for Southern California farms, good food businesses and institutional buyers. It has grown in popularity and has welcomed attendees from all sectors and institutions looking to increase purchasing of local and sustainable food products. CHIP will be hosting its fifth annual Showcase on September 15, 2017 in Encinitas. Exciting developments continue to occur for the Showcase, including a recent partnership with the Community Alliance with Family Farmers (CAFF), which will help expand the Showcase to other regions across the State of California.

INQUIRIES REGARDING THIS DOCUMENT MAY BE DIRECTED TO:

Community Health Improvement Partners – Food Systems
5095 Murphy Canyon Road, Suite 105
San Diego, CA 92123
(858) 609-7962
www.sdchip.org

All materials in this document may be reproduced and copied without permission. However, citation to source is appreciated. Suggested citation:

OUR VISION
San Diego County school children enjoy healthy foods that maximize seasonal and local products to bolster student achievement and wellness.