



California Schools and Universities: Procurement of Locally Grown Produce



Office of Farm to Fork
California Department of Food and Agriculture
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This report was developed by the California Department of Food and Agriculture's Office of Farm to Fork, in conjunction with the California Department of Education and the California Department of Public Health. The Office of Farm to Fork was tasked with developing a report documenting current and best practices for procurement of locally grown produce by schools and universities, including barriers to achieving them and recommendations for overcoming the barriers.



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Executive Summary

Many institutions, including schools and universities, are striving to buy and serve food from local growers. Procuring local produce can be beneficial for students, farmers, and the local economy and there are already many efforts underway in California. However, educational institutions also face a number of barriers to purchasing locally grown foods.

This report documents some of the common barriers that school districts and colleges/universities in California currently face that prevents them from readily accessing locally grown foods. Furthermore, this document identifies recommendations for overcoming these barriers and best practices for institutionalizing local procurement practices in schools.

Schools face several significant barriers to purchasing local produce, including high costs of food and additional labor; lack of infrastructure for storing and cooking fresh produce; lack of distribution; and food safety concerns. These barriers, however, are not insurmountable and many school districts, colleges and universities in California have developed programs to successfully procure local foods. Several of these programs are highlighted in the best practices section of this report and can serve as models for schools, colleges, and universities looking to begin or expand their existing local procurement. These best practices include:

- Finding a Mechanism to Connect Directly with Local Farmers
- Joint Purchasing and Leveraging Broad Purchasing Power
- Working with Farmer Collaborative
- Having a Dedicated Farm to School Specialist
- Harnessing Societal Change
- Diversify Procurement Methods
- Focusing on Sustainability

Additionally, the report recommends the following strategies for policymakers, community organizations, and government agencies to expand opportunities for local procurement and ensure the sustainability of such efforts:

1. Increase Transparency of Supply Chain through Large Produce Firms

Many school districts purchase from large institutional produce aggregators who, in addition to sourcing local produce, carry produce and products from throughout the world. By labeling local produce, large distributors can help schools identify what portion of produce they are currently receiving is from local sources. This information can help schools and universities determine what types of produce they should then focus on procuring independently of their normal distributors.

2. Develop Local Food Hubs

Local food hubs and farmer collaboratives aggregate a larger variety and quantity of local produce than individual farmers. Food hubs not only offer aggregation services, but can also aggregate other services such as distribution, marketing, and interfacing with schools and universities to facilitate local procurement.

3. Create More Ways for Schools to Connect with Farmers

Many schools and universities have difficulty finding and connecting with enough local farmers to supply a sufficient quantity and variety of produce. Creating more ways for

schools and universities to search for and connect with local farmers interested in selling to schools, such as the Office of Farm to Fork's California Farmer Marketplace, will allow educational food service to more easily connect with multiple local farmers.

4. Offer Grant Opportunities to “jump-Start” Local Procurement

Schools and universities often need initial momentum to put new policies and practices in place, specifically with respect to local food procurement. Offering grants to provide this momentum can give schools and universities the needed resources to design a local procurement policy, connect with local farmers, and incorporate local produce in their normal procurement process.

5. Increase Trainings and Technical Assistance

Trainings and technical assistance can help food service directors and their staff overcome some initial barriers to procuring and using local produce, and implement a sustainable program. Ongoing technical assistance can help schools as they expand their local procurement efforts.

Educational Institutional Food Service

The two main types of educational institutions discussed in this report are grouped as K-12 schools and colleges/universities. These two types of educational institutions share many similarities in terms of the methods they use to procure local produce and the barriers that they face.

Schools (K-12)

Schools are large institutional food providers – they are located throughout the state and often serving three meals a day as part of the National School Lunch Program, School Breakfast Program, and Child and Adult Care Food Program. In California, schools serve an average of 5.2 million meals every school day.¹ Through the federally funded Summer Meal Program, additional meals are served in schools, parks, and other

community locations during the summer months. In California, school meals fall under the purview of the California Department of Education. Because they serve federally reimbursable meals, school food service follows federal meal plans specified in the National School Lunch Program and School Breakfast program. These guidelines were recently updated in the Healthy and Hunger-Free Kids Act of 2010,² resulting in an increase of fruits and vegetables served.

What is Local?

For the purposes of this report, the term “local produce” refers to any produce grown within the state of California. However, many school districts and colleges use their own definitions of “local,” which can be defined by a more narrow radius.

Farm to School

Many schools around the country are implementing farm to school projects, which can take on a variety of different forms. They generally include both a nutrition education piece – teaching students about the origin of their food, tastings of different types of fruits and vegetables, or a school garden – as well as including locally procured foods in the cafeteria. These local items are sometimes featured as specialty items (e.g. through a Harvest of the Month program) or are included in the school’s regular menu offerings. In California, at least 353 K-12 school districts (2,626 schools) are participating in some sort of Farm to School program.³

Colleges and Universities

University food service is distinct from K-12 food service in several ways. First, although many university students participate in a school meal plan, they are a “choice” population – they have the option to purchase food elsewhere and do not need to purchase meals from the campus-run dining halls. This means food service directors need to compete in price, availability, and quality with other on- and off-campus food retailers. While this can encourage universities to experiment with creative marketing strategies and food choices, it also leaves their profit

¹ California Department of Education, available at: <http://www.cde.ca.gov/ls/nu/po/cefmealprog.asp>

² For a summary of the Healthy and Hunger-Free Kids Act of 2010, see the Food Research and Action Center’s summary at: <http://frac.org/highlights-healthy-hunger-free-kids-act-of-2010/>

³ United States Department of Agriculture, Farm to School Census, available at: <http://www.fns.usda.gov/farmtoschool/census#/state/ca>

margins conditionally unstable and reliant on students' purchasing choices. Additionally, unlike K-12 meals, university food service is not bound to regulations regarding what it can or cannot serve. This offers university dining services opportunities to be flexible in their procurement practices and responsive to larger external market forces that may or may not impact local procurement costs. Finally, while K-12 food service establishments usually serve students at a single location, for specified meal times, and at state-directed prices, universities and colleges must adapt to the diverse food service needs of their more informed and active student customer base.

Traditional Procurement Methods

Schools often purchase both food and non-food items through large distributors which are able to provide a large variety of produce and other food items, including processed foods (which range from peeled and cut vegetables to fully made, frozen entrees), and other non-food items.

Although most distributors source food from all over the country (and often internationally as well), they do often include local sources – especially in such an agriculturally productive state as California. Because California produces the vast majority of the country's fruits and vegetables, by default much of the produce offered through large distributors may likely be from within the state. However, distributors are not required to note products' point of origin and many distributors do not do so, therefore schools and colleges/universities are often not aware of how much and which products are local. Additionally, each district, college, and university defines "local" differently, and although some define locally as within California, others have a more narrow definition of local (e.g. within 150 miles).

**See Recommendation 1:
Increase Transparency through
Large Produce Firms**

Benefits of Local Procurement

Schools and colleges/universities have many different reasons for wanting to include locally grown produce in their cafeterias, including:

- **Food literacy and nutrition education** – students eating school/university meals not only get to eat more local foods, but they get to learn more about where their food comes from, how it is grown, and the importance of a healthy diet. These provide advantageous "teachable moments" that affirm a connection between students and farmers in their communities.
- **Fresher**—locally-grown food is usually eaten closer to the time that it was picked/processed than that which was shipped or trucked cross-country.
- **Supports local farmers and the local economy**—purchasing from local farms helps retain precious farmland and contributes to the local economy.
- **Fewer Food Miles**—purchasing food directly from local farms reduces trucking hours and carbon emissions, leading to smaller carbon footprints for food travel.

Institutional Appeal to Farmers

There are many advantages to farmers who want to sell to educational institutions, including:

- **Predictable usage** – educational institutions have a consistent demand for food and often determine their menus months to a year in advance.
- **High volume of sales** – schools and universities serve large numbers of students and make high volume purchases.
- **Use of product that has a smaller market value or generally falls out of a traditional market scheme** – whole produce that might be misshapen can be processed and included as part of a larger meal. Additionally, produce that might be considered undersized for adults can be the perfect size for a small child.

Barriers to Local Procurement

Barriers for Educational Institutions

Even with the best intentions, successfully procuring local produce can be difficult because school districts and colleges/universities face many barriers to local sourcing.

For **school food professionals**, the top cited deterrent for purchasing locally is related to the perceived extra amount of time and cost that it takes to buy directly from a local farm or purchase local foods.⁴

K-12 schools participating in the National School Lunch and School Breakfast Programs are reimbursed at the following rates for the meals they serve:

National School Lunch Program ⁵						
	Free	Free +6 cents*	Reduced-Price	Reduced-Price + 6 cents*	Paid	Paid + 6 cents*
Agencies that served less than 60% free/reduced-price lunches in 2012-2013	\$2.98	\$3.04	\$2.58	\$2.64	\$0.28	\$0.34
Agencies that served 60% or more free/reduced-price lunches in 2012-2013	\$3.00	\$3.06	\$2.60	\$2.66	\$0.30	\$0.36
Commodity Value	\$0.2925	\$0.2925	\$0.2925	\$0.2925	\$0.2925	\$0.2925

*Certified School Food Authorities are eligible to receive performance-based cash assistance for each reimbursable lunch served beginning October 1, 2012.

School Breakfast Program ⁶			
	Free	Reduced-Price	Paid
Basic Breakfast	\$1.62	\$1.32	\$0.28
Especially Needy Breakfast	\$1.93	\$1.63	\$0.28
*Note: Especially Needy Breakfast is for approved sites that served 40 percent or more free and reduced-price lunches in 2012-2013			

⁴ Zajfen, Vanessa. *Fresh Food Distribution Models for the Greater Los Angeles Region*, 2008, UEPI, Occidental College, available at: <http://www.ams.usda.gov/AMSV1.0/getfile?dDocName=STELPRDC5091502>

⁵ Chart from the California Department of Education, available at: <http://www.cde.ca.gov/ls/nu/rs/rates1415.asp>

⁶ Chart from the California Department of Education, available at: <http://www.cde.ca.gov/ls/nu/rs/rates1415.asp>

Schools have developed cost-effective strategies to operate under these resources, but these strategies have not traditionally focused on local procurement. Many schools are now having difficulty adapting to a model of serving more fresh fruits and vegetables.⁷

According to the Center for Food & Justice (CFJ), a division of the Urban & Environmental Policy Institute at Occidental College, the primary barriers that prevent institutions from accessing and utilizing local foods in their kitchens are shown below in Table 1.⁸

Table 1: Common barriers preventing schools from accessing and utilizing local foods according to CFJ	
▪	Inadequate kitchen facilities
	Limited cooking skills
	High labor costs
	Limited labor availability
	Inadequate storage facilities
	High minimum orders required from produce firms
	Limited outlets for local food
	Unrealistic institutional quality controls or food safety standards
	High price points
	Binding food contracts
	Geographic isolation
	Managing multiple farm accounts
	Rapid payment collection cycles
	Reliance on rebates and incentives from processed food providers

These barriers, as well as ones the Office of Farm to Fork learned about through research and interviews with K-12 school food service, college/university food service, and agricultural stakeholders are discussed in detail below.

Cost of Food

The cost, or sometimes perceived cost, of local food can be a barrier for schools and universities seeking to purchase locally. Food budgets for large scale education institutions are often not designed around procuring locally. The increased pressure to serve more fruits and vegetables under the new meal standards (for K-12 schools), increased focus on procuring locally (for both K-12 schools and universities/colleges), and current conditions (e.g. the drought in California) are creating additional challenges for schools and universities. If these entities are purchasing from smaller farms, the food costs might be higher because smaller farms do not have the same efficiencies of scale larger farms are able to achieve. Additionally, many large distributors and processors offer schools and colleges/universities discounts or rebates, further reducing the cost of their foods relative to those of smaller, local producers.

⁷ School Nutrition Association, *Back to School Trends Report*, August 2013, available at: http://sna.dev.networkats.com/Child_Nutrition/New_Back_to_School_Trends_Report_and_Other_Resources_for_You/

⁸ Zajfen, Vanessa. *Fresh Food Distribution Models for the Greater Los Angeles Region*, 2008, UEPI, Occidental College, available at: <http://www.ams.usda.gov/AMSV1.0/getfile?dDocName=STELPRDC5091502>

Cost of Labor

Labor costs can also be higher (or perceived to be higher) when purchasing local foods. This is because purchasing from local producers requires more time by both kitchen and administrative staff.

Although local foods can be purchased through a single distributor, oftentimes local purchasing requires nutrition services staff to deal with multiple, individual farms. Finding, working with, and keeping purchase orders from many individual producers takes more time than purchasing through a single distributor. Additionally, if purchasing from a single grower, there is the risk that a pest or adverse weather event might disrupt the planned order, inevitably leading to last minute purchases with associated costs.

Even more significantly, purchasing from local producers can require higher labor costs because of the increased need for kitchen staff. Local products are often unprocessed, so kitchen staff need to process and prepare them, which takes a higher level of training and time than using already processed items. Many schools and universities are unprepared to do this and need to hire more staff, or at a minimum, increase the training for their current staff, which increases labor costs through higher wages, more personnel, and increased training costs.⁹

Infrastructure

Products coming directly from a farm tend to be unprocessed, fresh produce; they require more equipment to process, store, and cook. Many schools and university food facilities lack the infrastructure to store and prepare produce from local farms.^{10,11}

Storage: Many schools currently rely on frequent deliveries from produce distributors for their fresh offerings, and/or use many frozen items in their menus. As a result, schools often have primarily dry and frozen storage capacity and insufficient refrigerated space to store enough fresh produce to include in meals.¹²

Kitchen Capacity: Additionally, many schools lack the processing and cooking facilities to prepare meals from fresh, unprocessed fruits and vegetables. Many school kitchens are primarily designed to heat frozen entrees or minimally prepare meals and do not contain the

⁹ Pew Charitable Trusts and Robert Wood Johnson Foundation, *Serving Healthy School Meals: Despite challenges, schools meet USDA meal requirements*. September 2013. Available at:

<http://www.rwjf.org/content/dam/farm/reports/reports/2013/rwjf407899>

¹⁰ Pew Charitable Trusts and Robert Wood Johnson Foundation, *Serving Healthy School Meals: Despite challenges, schools meet USDA meal requirements*. September 2013. Available at:

<http://www.rwjf.org/content/dam/farm/reports/reports/2013/rwjf407899>

¹¹ Pew Charitable Trusts and Robert Wood Johnson Foundation, *Serving Healthy School Meals: US schools need updated kitchen equipment*. September 2013. Available at:

http://www.pewtrusts.org/~media/Assets/2013/12/KITS_Equipment_Report.pdf

¹² Pew Charitable Trusts and Robert Wood Johnson Foundation, *Serving Healthy School Meals: US schools need updated kitchen equipment*. September 2013. Available at:

http://www.pewtrusts.org/~media/Assets/2013/12/KITS_Equipment_Report.pdf

ovens, slicers, adequate cold storage space, and other equipment necessary to prepare meals from scratch.¹³

Distribution

Many food service directors also cited distribution as a large barrier to purchasing local foods. Fresh foods are perishable and require specific, timely delivery and handling requirements. Because schools and universities traditionally order their food through distributors, they do not have to spend much time worrying about the logistics of delivery. These distributors typically have the capacity to distribute often (weekly or even daily, if requested) and to multiple sites. For school districts without a central kitchen or with several main cooking kitchens, delivery to multiple sites is essential and cannot always be handled in-house.

Food Safety Concerns

Food safety is of high importance for educational institutions. Not only do they serve large populations, but their populations are often more vulnerable to food borne illness than the general population (e.g. young children and adolescents). These concerns can influence school food purchasing, especially purchases of produce that will be served raw (e.g. salad greens). Even though all produce that comes in whole needs to be washed, whether it is from a distributor or directly from a farm, produce coming directly from a farm is much more likely to be whole and unprocessed. In response to food safety concerns, it can be easier for institutions to purchase pre-made food from suppliers, who in turn bear responsibility for food safety.

Administration Differences

Farms, distributors, and food service directors do not always speak the same language when it comes to produce ordering, including differences such as ordering by case versus volume. In addition, the time and frequency of payment can differ between schools and farmers, with farmers preferring to be paid faster (often on delivery) than districts are able to process payments.

Barriers for Farmers

On the **production side**, similar barriers exist that make it difficult for farmers to easily access and sell to schools and universities.¹⁴ Many farmers acknowledge the inherent benefit of selling their produce to schools and are interested in marketing to local institutions, but institutional barriers prevent them from easily selling to these markets. High food safety standards, low price points, and limited knowledge of institutional practices in schools often deter farmers from forging consistent relationships with schools and universities.¹⁵ Additionally, many smaller farmers lack the production capacity to keep up with the high demands of schools and have

¹³ Pew Charitable Trusts and Robert Wood Johnson Foundation, *Serving Healthy School Meals: Despite challenges, schools meet USDA meal requirements*. September 2013. Available at: <http://www.rwjf.org/content/dam/farm/reports/reports/2013/rwjf407899>

¹⁴ Zajfen, Vanessa. *Fresh Food Distribution Models for the Greater Los Angeles Region*, 2008, UEPI, Occidental College, available at: <http://www.ams.usda.gov/AMSV1.0/getfile?dDocName=STELPRDC5091502>

¹⁵ Zajfen, Vanessa. *Fresh Food Distribution Models for the Greater Los Angeles Region*, 2008, UEPI, Occidental College, available at: <http://www.ams.usda.gov/AMSV1.0/getfile?dDocName=STELPRDC5091502>

limited transportation or packaging resources to make the expected deliveries to schools. Table 2 shows the most common barriers, according to CFJ, that prevent farms from selling to schools.

Table 2: Common barriers preventing farmers from selling to schools according to CFJ¹⁶

- Inadequate or no packing and on-farm storage facilities
- Insufficient packing materials
- Limited or no access to value-added processing facilities
- Limited or no means of transporting foods
- Limited knowledge of institutional markets
- Lack of capital investment
- Limited or inconsistent food supply
- Geographic isolation
- Unrealistic institutional quality controls or food safety standards
- Low price points
- Competition with rebate incentives
- Competition from other businesses

Best Practices

Despite the number and variety of barriers to local sourcing, many schools are sourcing local produce and trailblazing new, innovative farm to school programs. The following methods and brief case studies describe some of the pioneering and effective local procurement methods sprouting up among K-12 schools and colleges/universities in California. K-12 Schools, colleges, and universities that want to begin or expand their local procurement practices should follow one or more of the following best practices.

Finding a Mechanism to Connect Directly with Local Farmers: Santa Monica and Brentwood

Although taking the time to find and work with individual farmers can be a barrier for some school nutrition departments, many schools are overcoming this obstacle by reaching out to multiple farmers through a single source like a certified farmers' market. By visiting a farmers' market, school food service staff are able to see the variety of local produce available and connect with multiple growers at once. Farmers' Market managers can also provide districts with information on their growers and crops.

One of California's first farm-to-school programs began when a school food service director started sourcing local produce by connecting with local farmers through a farmer's market. In 1997, school food service director Rodney Taylor began his "Farmers' Market Salad Bar" program at Santa Monica-Malibu Unified School District. He purchased produce directly from the farmers selling at the local farmers market and served the

**Opportunity for Expansion –
Recommendation 3: California
Farmer Marketplace**

produce in the district's salad bars. The program has been so successful that Mr. Taylor brought it with him to Riverside Unified School District, a larger district where he is now director.

Other food service directors have followed a similar path. For example, Phyllis Thivierge, the food service director at Brentwood Unified School District, has used the local farmers' market to connect with local farmers and has sourced produce from them.

Working with a Collaboration of Farmers: Riverside and Old Grove Orange

Other schools, such as Riverside Unified School District, have successfully procured local produce by working with a collaboration of farmers. A collaboration of farmers can take many different forms – a formal collaboration, a food hub (run by a third party), etc. – but generally (1) aggregates products from multiple farmers and (2) provides a single entity for buyers to contract with. Such collaborations help overcome several of the barriers discussed above.

- By providing a larger variety and quantity of local products, farmers' collaboratives allow food service staff to contact and work directly with a single entity. This decreases the **labor time** involved in finding, talking with, and finally contracting with multiple different growers in order to purchase a variety of different foods.
- Working with a farmers' collaborative can also make **distribution** – a barrier for both schools and farmers – more feasible. Because the farmers are already working together to jointly sell their products, they can share distribution methods and costs. This is especially helpful with large, fixed costs such as a refrigerated delivery truck, which individual farmers might not be able to purchase on their own.
- Farmers' collaboratives also help overcome some of the barriers farmers face in selling their products to local schools. By sharing resources, including **distribution and administrative support**, farmers cut down on the time and resources they need to devote to working with school buyers.

**Opportunity for Expansion –
Recommendation 2: Develop
Local Food Hubs**

One example of a successful partnership between a farmers' collaborative and a school district is the relationship between Riverside Unified School District and Old Grove Orange. Old Grove Orange is a grower's collaborative in Riverside County. Started by farmer Bob Knight, an orange grower, Old Grove Orange is now a collaboration among 28 farmers in the Inland Empire. The collaborative works together to distribute their products and shares numerous other resources (e.g. picking teams). Together, they are able to supply Riverside Unified School District a variety of fresh produce, including oranges, mandarins, strawberries, grapes, potatoes, and cucumbers. Riverside Unified then features this local food in salad bars throughout the district.

Joint Purchasing: Contra Costa and Ventura Counties

To overcome barriers of cost and distribution, some K-12 districts are partnering with their neighboring school districts and making joint purchases. By making joint purchases, districts (especially smaller districts) can lower the cost of the local foods they are purchasing because they are buying in larger quantities. Additionally, because this larger quantity is then divided

between multiple districts, individual districts address the problem of inadequate cold storage space or the food spoiling before use.

Two lead examples of such joint purchasing arrangements are Pittsburg Unified School District and Ventura Unified School District. Both districts are collaborating with other districts in their counties to pool their purchasing power to buy produce from local farms.

In Ventura County, Ventura Unified has partnered with neighboring districts Conejo Valley Unified, Rio School District, Ojai Unified School District, Hueneme Elementary School District, and Oxnard Elementary School District to form a partnership. All five districts are collaborating to write their menus together (utilizing in season produce), which in turn allows them to purchase together. The districts are reaching out to neighboring farmers as a group to purchase produce and even engaging in forward contracting (where the farm agrees to plant a number of crops specifically for the school districts, who purchase the produce prior to the planting).

In Contra Costa County, Pittsburg Unified is leading the effort to create a county-wide buying collaborative to purchase locally grown fruits and vegetables. Pittsburg Unified itself serves over 15,500 meals a day and spends approximately \$370,000 annually on fruits and vegetables, but by combining efforts with other districts in Contra Costa County it can vastly increase its purchasing power. Seven other districts in the county have joined Pittsburg. The districts all shared their purchasing needs and are currently in the process of reaching out to local farmers for products.

Both Pittsburg Unified and Ventura Unified have food service directors that have prioritized farm to school programs. They have both pursued and received USDA Farm to School Grants, which have helped catalyze their progress.

**Opportunity for Expansion –
Recommendation 4: Offer more
grant opportunities**

California colleges and universities can also use their size and purchasing power to help establish new standards and distribution systems to meet their needs, which may include local procurement.

Having a Dedicated Farm to School Specialist: San Diego Unified and Oakland Unified

Some schools, often larger districts, are creating full-time Farm to School Coordinator positions. Although having a full-time Farm to School staff position does require financial resources, it reduces the burden on other employees to search for, find, and work with individual farmers and, perhaps more importantly, allows for development of in-house expertise and long-term relationships with local growers.

Having a dedicated farm to school specialist often works best for larger districts because of the large volume of produce they purchase. This means that they are more likely to have the resources for an additional staff person, and also that procuring locally can involve working with more farmers than a smaller district in order to meet demand. Additionally, a farm to

school staffer can also focus on integrating local procurement with school gardens and nutrition education in the classroom.

San Diego Unified School District was one of the first districts in the country to have a dedicated Farm to School Specialist. Their specialist looks at the district's menus, determines what could be purchased from local growers, then finds local farmers to provide the needed produce. Through its Farm to School Specialist, San Diego Unified is able to provide its students local foods on their salad bars and through a Harvest of the Month Program.

**Opportunity for Expansion –
Recommendation 5: Increase
Trainings and Technical Assistance**

Oakland Unified School District also has a dedicated Farm to School Supervisor, who helps purchase local food, integrate local products into the menu, and integrate school food service efforts with nutrition education programs in the classroom. Oakland Unified is currently focusing on its California Thursdays program, where every Thursday the district sources an entire entrée from only California products.

Harnessing Societal Change: U.C. Berkeley and U.C. Davis

Students in every region of the state are interested in accessing local and sustainable food on their campuses. Around a quarter of California colleges surveyed by the California Alliance with Family Farmers in 2008 had an existing local food program and a further quarter more were in the process of developing a local food program. As of today, nearly every state-run institution of higher education (23 California State University campuses, and 10 University of California campuses) in California has a local food program.

These local food programs are often started in conjunction with student activism around food. For example, the student-led “The Real Food Challenge” is a national program aimed to leverage the power of youth and universities to encourage institutions to shift their food procurement towards local and community-based food sources by 2020. The campaign maintains a national network of student food activists and university representatives and is currently being embraced by several colleges in the California State University System and private universities as well (for example CSU Chico, Pomona College, Santa Clara University).

The University of California at Davis has been successful in embracing the Real Food Challenge commitment through its partnership with Sodexo, a food service and facilities management company, to support a sustainability program that works with local and regional farm to fork programs, the U.C. system and Sodexo North America to share best practices, contribute to the U.C. system food policy, and help distributors improve grower identity. Currently, more than 21% of food purchases for campus dining halls are local, organic, or otherwise sustainable. The annual Sustainable Progress Report for U.C. Davis notes that for the 2011-2012 academic year, 8% of food for residential dining and 3% of retail dining was purchased within 250 miles. Additionally 1% of the food offered on campus is grown on the U.C. Davis Student Farm. These local purchases total more than \$700,000 of the university's annual food budget that remains in the local economies of Davis and the surrounding localities.

Additional costs associated with buying local foods for school meal plans can be shared by passing along the costs to students' individual item purchases at campus cafes. According to a 2008 study conducted by the California Alliance with Family Farmers, 69% of students surveyed claim that they would be willing to pay a premium for local produce, which can help food service directors recover the costs of local purchases. Food service directors can feed upon this energy and enthusiasm to create new local food programs to meet student demand.

The University of California at Berkeley has done just that; Shawn LaPean, U.C. Berkeley's Food Service Director notes many of Cal Dining's local procurement initiatives have been at the request of Berkeley students who have expressed interest in eating local, organic products. "Students want to be sustainable, but don't know how" says LaPean. And they also want inexpensive food, as college fees and tuition increases. Cal Dining has transitioned to natural, organic, and trans-fat free packaged items at retail locations and have added several of these items based on customer (student) responses; of its \$15 million annual budget, the University spends 39% of its food budget on locally-produced food (in comparison, U.C. Santa Cruz spends 30% and U.C. Davis/UCLA spend less than 20%). Cal Dining acknowledges that being situated in an agriculturally rich region has assisted in local procurement, but the active and engaged public and student communities who are supportive of local agriculture has been the greatest advantage.

Diversify Procurement Methods: Cal Poly, San Luis Obispo & C.S.U. Chico

One of the tangible barriers that currently prevent local purchasing is existing contracts university dining services have with large distributors who purchase and aggregate products from across the nation, and lack either the ability or incentive to source their products. While purchasing primarily from these large scale producers and distributors can ultimately reduce costs, maintaining a small carve out in food budgets to purchase specialty products or fresh perishable produce to be sold whole and uncut, is one way to incrementally institute local purchasing.

California Polytechnic State University in San Luis Obispo uses these large food distributors (mainly Sysco and US Foods) for bulk purchases, but also makes a concerted effort to use additional small-scale providers, local bakeries, and restaurants (Edna's Bakery, San Luis Obispo; Season Seafood, Atascadero; Kaney Food Service Company, San Luis Obispo; Producer's Dairy, Fresno), and organic producers for specialty products. Along with these vendors, Campus Dining works to secure local and regional foods, including those from the Cal Poly Organic and Cal Poly Sustainable Farms. University chickens provide more than 50,000 eggs per year to the campus, University-made jams, BBQ sauces, chocolates, milk, cheese and other products made by the Food Science Department and the Dairy Products Technology Center. The remaining food is sourced through NuCal Foods Inc., an agricultural cooperative composed of Northern American family farmers who run sustainable farms. Whenever possible, Campus Dining purchases locally grown produce.

**Opportunity for Expansion –
Recommendation 1: Increase
Transparency through Large
Produce Firms**

Likewise, prior to the University of California system's adoption of the Real Food Challenge, the California State University, Chico purchased exclusively from U.S. Foods. One of the huge challenges the University faced using this distributor was its inability to source its products. Specifically, the contract with the large distributor did not specify that transparency in produce origin was a necessity. As a result of this inability, CSU Chico has recently become one of the first California State universities to become a part of the U.C. procurement pack. In this cooperative agreement, food is purchased through a number of vendors, and contracts are subject to the U.C. Office of the President's sustainability goal, decreeing that 20% of university purchases will be local and sustainable by 2020. In addition to serving as a part of this U.C. procurement pack, CSU Chico purchases various products from the university farms and locally-sourced producers. Trinity Fresh, a produce distributor based out of Northern California, provides most of the fresh produce available at CSU Chico. The University also supports the position of a sustainability intern, who spends 15-20 hours a week sourcing all other products purchased by the Associated Students Dining Services.

Focusing on Sustainability: U.C. Berkeley & U.C. Irvine

Beyond some of the aforementioned best practices and model programs, all of the above college and university campuses have married the move to purchase local products with a broader education campaign about sustainability and its related benefits. Additionally, in stressing local food procurement, universities can provide higher-quality food that has an added benefit to their local economies. In an effort to do so, a series of methods can be undertaken:

- Using menus and point of purchase cards to label what is sustainably grown or local is a powerful way to educate consumers while simultaneously providing an easy way to track consumption of the item;
- Using images and farmer profiles can help tell a story about what it means to purchase locally;
- Educating students about the broader health benefits of supporting local sustainable small-scale agriculture can inspire life-long healthy eating habits;

U.C. Berkeley and U.C. Irvine have embraced the U.C. President's Sustainable Practices Policy and have sought to educate their students on related sustainability efforts. They include some of the following initiatives:

U.C. Berkeley:

- Composting effort—currently have 85% diversion with a goal of zero waste by 2020 (Collect over 100 tons of food waste for composting; post-consumer waste; and [residential composting pilot for to-go containers](#) & food waste);
- First University organic certification & 100% organic salad bars in all residential dining locations
- [Donate additional food](#) to a non-profit family shelter
- Recycle within our food service operations
- “Farm to Table (Slow Food)” concept at Clark Kerr dining commons in fall 2007;

- trans-fat free in all facilities.

U.C. Irvine:

- Each quarter, the Hospitality & Dining Services holds *Weigh the Waste* events at dining commons to educate students about ways to reduce food waste;
- To date, Hospitality & Dining Services has donated over 6,500 lbs. of food through the Food Donation Program to help those in need;
- Installing efficient hydration stations across the campus with filtered water
- Waste diversion at two dining facilities;
- Offer “meatless Mondays” at several dining commons

Recommendations for Expansion and Sustainability

While schools can expand their local procurement by focusing on the above best practices, businesses, policy makers, non-profits and community organizations, and government agencies also have a role to play in expanding opportunities for sustainable local procurement. The following recommendations identify solutions that address and reduce many of the barriers faced by farmers, K-12 schools, and colleges/universities.

1. Increase Transparency of Supply Chain through Large Produce Firms

Label Point of Origin

Suppliers already keep track of where their produce is coming from to comply with food safety traceability standards in case of a food borne illness outbreak. By transmitting this information to the educational institutions that purchase through them, large distributors can assist schools in understanding what they already purchase locally. This information, in turn, can allow the schools to market local produce as local, and informs their decision making about future local produce purchases. For example, if a school aims to purchase local broccoli and carrots but knows that its distributor is already providing local broccoli, the school can spend its time more efficiently and reach out to primarily carrot growers.

Develop Specifically Local Lines

To match the demand for local foods, many of these larger produce firms have developed local food lines that operate in conjunction with, or within, the larger conventional food business.¹⁷

This type of produce line is in its nascent form, but is gaining in popularity as systems are being developed and put in place. The success of these types of produce models is primarily due to the large amount of company-wide capital, expertise, and high volume sales of staple items and more inexpensive produce items.¹⁸ They benefit schools because of the large buying power of the large produce firms, which creates more affordable local produce lines. In addition, the school only is required to work with one firm, but may be purchasing from many farms. This system also benefits farmers as it provides higher and consistent sales in addition to marketing

¹⁷ Zajfen, Vanessa. *Fresh Food Distribution Models for the Greater Los Angeles Region*, 2008, UEPI, Occidental College, available at: <http://www.ams.usda.gov/AMSV1.0/getfile?dDocName=STELPRDC5091502>

¹⁸ Zajfen, Vanessa. *Fresh Food Distribution Models for the Greater Los Angeles Region*, 2008, UEPI, Occidental College, available at: <http://www.ams.usda.gov/AMSV1.0/getfile?dDocName=STELPRDC5091502>

and public relations opportunities.¹⁹

While purchasing in season can help reduce some of the costs, local produce lines can be more expensive than more conventional produce lines. In addition, very small farms are not always able to sell to larger institutions due to the high cost of insurance the insurance policies required by large produce aggregators.

2. Develop Local Food Hubs

Local food hubs have been cited as one possible solution to address the barriers that Food Service Directors face regarding stringent budgets and time spent finding a sufficient variety and quantity of produce, as well as the barriers farmers face regarding storage, distribution, and marketing to institutions.

A food hub is a mission driven business or organization that provides aggregation and distribution services while at the same time promoting and maintaining certain core values such as equitable income for farmers and healthy food access.²⁰ Food hubs can vary in form – some exist as physical warehouses that aggregate products, others aggregate and process (e.g. cut up vegetables; wash; package products) and others are virtual food hubs, providing an online location for producers to connect with consumers.

Numerous food hubs are sprouting up across the US and are attracting recognition for the services that they are providing to school districts. *Local Food Hub* is a Food Hub located in Charlottesville, Virginia that aggregates produce from over 70 small family farms within a 150-mile radius from the city. Their aggregation system primarily serves hospitals, schools, and small restaurants and enables them to buy local produce in bulk. They provide fresh produce to over 45 public schools and universities at a price that is comparable to large-scale production farms. In addition, they work with local stakeholders, public health practitioners, educators, and nutritionists to pool together funding and resources to make their services more effective.²¹ Other similar initiatives are being undertaken by ALBA Organics in Salinas, CA and by Green Mountain Farm Direct in Vermont. Other online resources such as Aglink (www.aglink.com) and Food Hub (<http://food-hub.org/>) serve as online marketplaces where Food Service Directors can find aggregated produce to serve to their students.²²

Food hubs tend to be successful when they follow a Farmer Collaborative model, whereby farmers themselves are aggregating their produce, rather than having an outside

¹⁹ Zajfen, Vanessa. *Fresh Food Distribution Models for the Greater Los Angeles Region*, 2008, UEPI, Occidental College, available at: <http://www.ams.usda.gov/AMSv1.0/getfile?dDocName=STELPRDC5091502>

²⁰ Flaccavento, A. (2009). Healthy food systems: A toolkit for building value chains. *Appalachian Sustainable Development*.

²¹ Local Food Hub. (2012, December). Farm to school. Retrieved from: <http://localfoodhub.org/our-programs/farm-to-school/>

²² Zajfen, Vanessa. *Fresh Food Distribution Models for the Greater Los Angeles Region*, 2008, UEPI, Occidental College, available at: <http://www.ams.usda.gov/AMSv1.0/getfile?dDocName=STELPRDC5091502>

organization.²³ A farmers' collaborative is a group of farmers working collectively to market their crops either through a formalized legal cooperative, an informal collective of farmers addressing best management strategies, or by partnering with a third-party organization that markets, distributes, or sells food on behalf of the farm group is a farmer collaborative.²⁴

As learned from Grower's Collaborative (GC), an LLC run by the Community Alliance with Family Farmers (CAFF) that closed in 2010, working with a third-party organization has its downfalls. Due to the small size of Grower's Collaborative, GC was unable to cover its expenses and make enough revenue and sales to cover their costs.

Food Hubs may begin to play a pivotal role in matching community-based concerns with federal guidelines. At this time, no full analyses of Food Hubs have been made regarding their effectiveness in terms of public health concerns and most studies have been focused on needs assessments and the intricacies of creating Food Hubs.²⁵ It is imperative that developing Food Hubs be carefully monitored to see their impact on food systems and how they can serve to bring fresh fruits and vegetables to hungry children whose buying power will shape the health of our population and the environment in which they live.

3. Create More Ways for Schools to Connect with Farmers: California Farmer Marketplace

Efforts to create centralized places to find a multitude of farmers interested in selling their produce to schools can overcome the barriers of the time and expertise it takes food service directors to connect with local farmers, in addition to helping farmers market their products to school and college/university food service.

One such effort is the new California Farmer Marketplace, currently being developed by the California Department of Food and Agriculture's Office of Farm to Fork. This online marketplace will allow farmers to post pertinent information that is relevant for school districts and will encourage schools to work more directly with farms in California.

The Marketplace will help school districts connect with and purchase directly from California farmers and ranchers. The online marketplace will enable schools to easily find farmers in their region without having to take the time to independently search for individual farmers interested in selling to schools. In addition to crop and location data, the database will have information on things like GAP certification and liability insurance, which are often required by schools. This searchable database will enhance the ability of schools to run farm to school programs and support their local farmers. For example, a school district could search for an

²³ Zajfen, Vanessa. *Fresh Food Distribution Models for the Greater Los Angeles Region*, 2008, UEPI, Occidental College, available at: <http://www.ams.usda.gov/AMSV1.0/getfile?dDocName=STELPRDC5091502>

²⁴ Zajfen, Vanessa. *Fresh Food Distribution Models for the Greater Los Angeles Region*, 2008, UEPI, Occidental College, available at: <http://www.ams.usda.gov/AMSV1.0/getfile?dDocName=STELPRDC5091502>

²⁵ Feenstra, G; Lerman, T; & Visher, DF. (2012). *A practitioner's guide to resources and publications on food hubs and values-based supply chains: A literature review*. Sustainable Agriculture Research and Education Program Agricultural Sustainability Institute, University of California, Davis.

apple grower within 100 miles of the district, who is willing to sell to schools and is GAP certified with a minimum amount of liability insurance, and then reach out to that farmer to supply apples for the district's school meal program.

4. Offer Grant Opportunities to “Jump-Start” Local Procurement

Many of the schools highlighted as best practices received specific funding to start their local procurement programs. Obtaining additional funding can provide the momentum to overcome initial barriers and establish a local procurement program. For example, Pittsburg Unified, Ventura Unified, and Oakland Unified have all received funding through USDA’s Farm to School Grant Program to start their respective local procurement efforts.

Funding is currently available through several USDA programs, including [USDA’s Farm to School Grants](#), [USDA’s Specialty Crop Block Grant Program](#) (administered in California by the California Department of Food and Agriculture), and private foundations to support various types of farm to school and local procurement efforts. Additionally, [USDA offers equipment grants](#) that can help school districts upgrade their equipment infrastructure to work with more fresh produce.

Maintaining and increasing these funding opportunities is key to getting new districts on to begin local procurement.

5. Increase Trainings and Technical Assistance

Offering training and technical assistance can help address many of the barriers discussed above. Specifically, training and technical assistance can help food service directors bridge the knowledge gap regarding:

- **Food Safety**
Schools and universities interested in purchasing produce directly from a local farm often have concerns about food safety. Offering trainings and technical assistance that explains what schools should be doing and who to contact for help can give school food service directors the confidence they need to procure produce directly from a local farmer.
- **Menu Development**
Schools and universities that are used to purchasing pre-made foods (e.g. heat and served) might have difficulty developing seasonally appropriate menus that incorporate local foods. Training and technical assistance can overcome this barrier.
- **Kitchen Training and Professional Development**
In addition to assistance with menu develop, schools often also need to offer their staff training and professional development (e.g. cooking and knife skills), to assist in the transition from heat and serve to cooking kitchens.
- **Funding Opportunities**
Schools are often unaware of additional funding sources to begin local procurement programs. Highlighting these programs and offering assistance with the applications can encourage more schools to apply.

Examples can be the best way to inspire food service directors to make the jump to local procurement. The California Department of Education currently runs an ambassador program that highlights exemplary food service directors throughout the state and can use this successful program to highlight local procurement successes. Additional resources are offered through USDA (<http://www.fns.usda.gov/farmtoschool/farm-school>) and the California Farm to School Network (<http://www.cafarmtoschool.org/>).

Conclusion and Final Recommendations

Many California schools, colleges, and universities are recognizing the benefits of including locally procured fruits and vegetables as part of the meals they serve and are making great strides to include local produce in their menus. However, as schools, colleges, and universities focus on procuring local produce to serve to their students, they face significant barriers that make it more difficult to purchase local foods. These barriers include the cost of food and cost of labor; lack of infrastructure for storing and cooking fresh produce; lack of distribution; and food safety concerns.

To overcome these barriers, schools and universities can follow the best practices and model programs described in this report. Although there is no one size fits all solution for overcoming barriers to local purchasing, many successful programs tend to utilize some of the following strategies:

- **Leveraging Purchasing Power and Making Joint Purchases**
By collaborating with neighboring districts (K-12) or a larger university system, schools can increase their buying power. As the examples of the K-12 school collaborations in Contra Costa and Ventura counties and the U.C. Procurement Pack show, by banding together schools and universities can decrease the costs of local foods and work together to overcome the distribution, storage, and administrative barriers. Leveraging purchasing power can also motivate distributors to carry more local lines and/or label the point of origin of the current products.
- **Developing Strong Relationships with Local Farmers**
Connecting with local farmers and forming strong relationships with them can help diversify schools' supply chains and help
- **Hiring a Local Procurement or Farm to School Staff Member**
Typically more feasible for larger districts, hiring a position to coordinate local purchasing, farm to school programs, or farm to college program can help schools build long-lasting relationships with local farmers and develop in-house expertise and processes for local sourcing. For example, both Oakland Unified School District and San Diego Unified School District have full time positions dedicated to their farm to school programs.
- **Harness Societal Change**
As students demand local foods, universities and colleges can harness that demand to create new menu offerings, marketing opportunities, and the ability to pass along some of the increased costs to the consumers.

- **Diversify Procurement Methods**

Utilizing multiple distributors for specialty products can allow educational institutions to use smaller distributors for local purchases and other specialty products.

In addition to the best practices schools can follow to increase their local procurement of produce, other organizations (such as government and non-profits) can help as well. To expand and sustain opportunities for local procurement, they can:

- 1. Increase Transparency of Supply Chain through Large Produce Firms**

By labeling local produce, large distributors can help schools identify what portion of produce they are currently receiving is from local sources.

- 2. Develop Local Food Hubs**

Local food hubs and farmer collaboratives aggregate a larger variety and quantity of local produce than individual farmers. They can also offer services such as distribution, marketing, and interfacing with schools and universities.

- 3. Create More Ways for Schools to Connect with Farmers**

Creating more ways for schools and universities to search for and connect with local farmers interested in selling to schools, such as the Office of Farm to Fork's California Farmer Marketplace, will allow educational food service to more easily connect with multiple local farmers.

- 4. Offer Grant Opportunities to "Jump-Start" Local Procurement**

Grants can provide the initial momentum and give schools and universities needed resources to plan and begin local procurement.

- 5. Increase Trainings and Technical Assistance**

Trainings and technical assistance can help food service directors and their staff learn how to procure and use local produce. Ongoing technical assistance can help schools as they expand their local procurement efforts.

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