

Fast Food And Healthy Food:
Evaluating Programs And Policies For Healthy Food Alternatives
In Southern California Schools

A Report to the John Randolph and Dora Haynes Foundation

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Table of Contents

<i>Executive Summary</i>	1
<i>Background: The School Food Environment</i>	1
Demographic Factors Regarding the School Food Environment	2
<i>Los Angeles County: Socio-Economic and Health Profile.</i>	2
<i>Southern California: Socio-Economic and Health Profile.</i>	3
School Food Concerns	3
<i>Policy Initiatives: The Soda Ban</i>	4
LAUSD Implementation of the Soda Ban	5
<i>Policy Initiatives: Obesity Prevention Motion</i>	11
LAUSD Implementation of the Obesity Prevention Resolution	12
<i>Innovative Programs: Farm to School -- School Lunch Strategies</i>	13
Evaluations of Farm to School Programs	16
Fruit and Vegetable Consumption	16
<i>Innovative Education: The Fresh from the Farm Project</i>	17
Evaluation of the Program	19
Cost of the Program	19
<i>Policy and Program Recommendations: Strategies for Implementation and Institutionalization</i> 20	
Policy Implementation	20
Program Implementation: Farm to School and the School Breakfast and Lunch Program.....	22
Sustaining Innovative Education Programs	24
Making it Happen	26

Executive Summary

In the past few years, an enormous amount of attention has been focused on the issue of obesity and its attendant health risks, including the prevalence of overweight among school-aged children. New programs and policies have been adopted at the school district, city, regional, state and national levels to address these problems, though such initiatives have yet to be fully developed and institutionalized. Moreover, efforts to develop and implement such obesity prevention approaches by engaging such stakeholders as students and youth, parents, and teachers have also been limited.

This report seeks to analyze the issue of obesity in relation to food and nutrition in Southern California schools, highlighting the Los Angeles Unified School District. It evaluates the development of new and innovative model programs, policies, and educational initiatives for healthy food choices in the region, as well as the barriers for establishing and implementing them. The report indicates that while LAUSD has established important and sometimes far-reaching healthy food policies and programs, implementation has been uneven and has not fully engaged key school food stakeholders, including students, teachers, and parents. Innovative programs have been explored, but have not yet been institutionalized or have been abandoned. The report concludes with recommendations for addressing these barriers and further expanding and institutionalizing model healthy school food programs and policies. Key recommendations include establishing more inclusive mechanisms for policy implementation, such as for the selection of healthy beverages and cafeteria choices, and a plan to implement key goals, such as the development of salad bar programs.

Background: The School Food Environment

The crucial issue framing current efforts and debates about nutrition education and food choice is the alarming increase in the prevalence of overweight among American children. The number of overweight school-aged children tripled from 5% in 1980 to 15% in 2000.¹ United States Surgeon General Richard Carmona has called obesity America's single biggest health problem, as the evidence of the relationship between obesity and a number of chronic illnesses such as type 2 diabetes has become increasingly clear.² Although dietary choices are not the only factors influencing this trend, they are an important focal point for intervention. Schools are a key arena for action because public influence over school systems is substantially greater than potential impacts in private-sector settings. The USDA-funded meal (breakfast, lunch and snack) programs provided in the school cafeteria; the foods competing with these USDA meals, mostly sodas and junk food items offered in vending machines and student stores; and the choices available in neighborhood food outlets (primarily fast food) surrounding schools constitute the types of food options students have during the course of the school day. Similarly, there has been a significant change in the number and type of meals and food offered in the home. While meals

¹ Ogden C., Flegal K., Carroll M., and Johnson C. Prevalence and trends in overweight among US children and adolescents, 1999-2000 *JAMA* 2002; 288: 1728-32

² Pi-Sunyer X (2003). A clinical view of the obesity problem. *Science*, 299(7): 859-860; Neisner J., Histon T., Goeldner J., and Moon C. Background paper on the prevention and treatment of overweight and obesity *Kaiser Permanente Institute for Health Policy*, Prepared for the Roundtable "Prevention and Treatment of Overweight and Obesity: Toward a Roadmap for Advocacy and Action August 14 & 15, 3002

prepared at home accounted for slightly less than 20 hours a week in the 1950s, that number decreased to less than 10 hours a week in 1998/1999.³ Eating out has come to mean eating large, super-sized portions of food and beverages. For example, when McDonald's outlets first opened in the 1950s it typically offered a 7-ounce soda, while current choices range from a 12-ounce "child size" to a 32-ounce super-sized soda.⁴ As criticisms have mounted about portion size, fast food chains have sought to assuage such criticisms by offering smaller-sized portions. Nevertheless, overall size offerings still remain 2 to 3 times larger than when first introduced.

Schools campuses have also witnessed changes in both food availability and student perception's of food choices and nutritional issues. The loss of kitchens from individual school sites, dramatic overcrowding in inner-city schools, the reduction of time available for lunch, the increasing inclusion of fast food items in the lunch menu, and the widespread availability of sodas and junk food in vending machines all send a clear signal to students that food choice is not integrated into the educational experience. Though funding for nutrition education in recent years has steadily increased, nutrition education is still perceived as an abstract topic, and it often does include a focus on students' understanding of where food comes from or how fresh and unprocessed foods taste. Students (and families) have also lost or are losing food preparation skills. And while there is more research needed to evaluate the impact of diet on school performance, including consumption of large-portions of high sugar, high fat, and high salt foods, there is some evidence that a student's capacity to learn is correlated to dietary factors.⁵

Demographic Factors Regarding the School Food Environment

One of the striking features of the rise in overweight among school-aged children is its relationship to income status.⁶ Large percentages of overweight children come from low-income families whose income level qualifies their children to receive free or reduced-price school meals. Criteria for free and reduced-price lunch are set in relation to the Federal poverty guideline (130% of the poverty rate for free meals and 185% for reduced meals). A summary of that data is included below (Table 1).

Los Angeles County: Socio-Economic and Health Profile.

Los Angeles County is the most populous county in the United States, with over 9.6 million residents in 2002. According to 2002 census data, 22.2% of all Los Angeles children lived at least part of the year under the Federal poverty line of \$15,000/year for a family of 3. About 1.7 million children in Los Angeles County attend school at the K-12 level in the County's 84 public school districts, the majority (61%) of whom are Latino.⁷ Almost 62% of school children in Los Angeles County are eligible for the free and reduced-price meals, in contrast with the statewide

³ French SA, Story M, and Jeffery RW Environmental influences on eating and physical activity. *Annual Review of Public Health* 2001; 22: 309-35

⁴ Eric Schlosser, *Fast Food Nation: the Dark Side of the All-American Meal* (Houghton Mifflin: New York, 2001), p. 241.

⁵ Pollitt E and Mathews R. Breakfast and cognition: an integrative summary. *Am J Clin Nutr.* 1998 Apr;67(4):804S-813S.

⁶ Drewnowski, A and Specter SE, "Poverty and Obesity: the Role of Energy Density and Energy Costs," *American Journal of Clinical Nutrition*, 2004; 79:6-16.

⁷ U.S. Census Bureau, American Community Survey Profile, 2002, Los Angeles County, General Demographic Characteristics.

average eligibility rate of just under 50%.⁸ Childhood overweight in Los Angeles County is high: 21% of 5th, 7th, and 9th graders are overweight and 19% are at risk of becoming overweight.⁹

Southern California: Socio-Economic and Health Profile.

In the 8 counties surrounding Los Angeles, as many as 121 school districts qualify as low-income with free and reduced-price meal eligibility above 50% (see Table 1).¹⁰ Latinos make up the largest ethnic group among the students in 105 of these school districts; Anglos are the largest ethnic group in 11 districts, Asian students in 3 districts, and American Indian students in 3 districts.

Table 1. Southern California school districts, by county & majority ethnic group		
So. Cal. Counties	No. of districts with > 50% student enrollment in free/reduced-price meals	Largest ethnic group among student enrollment in districts
Los Angeles	43 districts	Hispanic (41); Asian (3)
Riverside	16 districts	Hispanic (13), Anglo (3)
San Bernardino	15 districts	Hispanic (11), Anglo (4)
Imperial	12 districts	Hispanic (10), Am Indian (1), Anglo (1)
San Diego	9 districts	Hispanic (8), Anglo (1)
Ventura	9 districts	Hispanic (8), Anglo (1)
Orange	8 districts	Hispanic (8)
Santa Barbara	8 districts	Hispanic (6), Am Indian (1), Anglo (1)
<i>Total Counties: 8</i>	<i>Total Districts: 121</i>	

School Food Concerns

Schools can play an important role in preventing childhood overweight by providing ready access to healthy meals with appropriate calories and nutrients, providing nutrition education that encourages healthful food selections, offering opportunities for physical activity, and creating school environments that model health-promoting behaviors and choices.¹¹ The school meal contributes a significant portion of the daily nutrient intake of many children – especially those

⁸ Ed-Data Educational Partnership, Countywide Profile for Los Angeles County, 2002-2003 Fiscal Year.

⁹ County of Los Angeles, Department of Health Services, Public Health Division. Obesity on the rise (2), 2003.

¹⁰ Ed-Data Educational Partnership, Demographic Comparison of School Districts, 2002-2003 Fiscal Year.

¹¹ Harrison MK, Peggs C: The role of schools in preventing childhood obesity. W V Med J. 2002 Nov-Dec; 98(6): 260-2.

eligible for the free and reduced meals through the National School Lunch Program – 2/3 of all Los Angeles school children (over 1.4 million).

While the rate of overweight has increased among children and adult populations over the past few decades, funding for education has become more limited. For nearly three decades, State and local spending per pupil in California has declined in real terms.¹² During the same period, school districts have become more constrained regarding budgetary allocations since a larger portion of their revenues have become tied to state constitutional requirements created through voter approved initiatives.¹³ In this budget context, many districts have expected or even required that their food service departments remain revenue neutral or generate additional revenue for other district operating costs.

In turn, school food programs have had to compete for sales in an environment filled with fast food, soft drink, and snack food advertising and availability. Many school districts are competing for student participation in meal programs by providing foods that mimic the fast foods marketed to children. In some cases, these efforts take the form of contracts with fast food companies while, in other cases, the school lunch menu regularly features foods such as pizza, hamburgers, and french fries. This trend is largely driven by industry's successful brand-oriented marketing, which in turn establishes taste preference for fast food entrees as "good food".

Until recently, individual schools and school districts in Southern California, including LAUSD, have also encouraged increased sales of competitive foods through "pouring rights" contracts with fast food and soft drink vendors.¹⁴ Competitive foods are those sold in competition with the National School Lunch or School Breakfast Programs, generally available in vending machines, student stores and as a la carte items. A 2002 study conducted by WestEd for the LAUSD Board of Education found that typical competitive food choices available in vending machines and student stores generated far greater nutritional concern than school lunch program items, which adhere to a range of USDA guidelines. Competitive foods identified included sodas, hard candy, snack bars, chips and various confections that are "high in added sugar, refined starches and sodium, and poor in dietary fiber, fruits and vegetables and associated minerals and vitamins."¹⁵ These issues became the backdrop for the development of new policies and approaches.

Policy Initiatives: The Soda Ban

On August 27, 2002, the Los Angeles Unified School District Board unanimously voted to ban soft drinks in all LAUSD schools, beginning January 2004. The soda resolution was a result of a number of factors, including community, teacher, and parent input, an organizing campaign launched by a coalition of healthy food and community food advocates, strong advocacy by some LAUSD board members, and the growing public recognition that the constant availability and consumption of high sugar and highly caffeinated soft drinks can contribute to significant

¹² Rothstein, Richard. "When States Spend More," in *The American Prospect*, January 1998, (Volume 9, Issue 36).

¹³ "California's School Finance System: A Guide." Ed-Data Partnership.
www.data.k12.ca.us/Finance/SF_Prime2.asp

¹⁴ Marion Nestle, *Food Politics: How the Food Industry Influences Nutrition and Health*, (Berkeley: University of California Press, 2002, pp.197-218

¹⁵ "Nutritional Assessment of Foods Sold in LAUSD Schools," (Los Angeles: LAUSD, Contract # RFP#502-114-002, Agreement #200925), 2002

adverse health and learning impacts. Several groups, including the Center for Food and Justice (a division of the Urban and Environmental Policy Institute at Occidental College) and the California Food Policy Advocates, played a major role in providing information and outreach for the development of the resolution. The Center collaborated with the Center for Public Health Advocacy and LA Project LEAN to support the passage of the Soda Ban. The Center also worked closely with the Healthy School Food Coalition, a parent and student organization focused on LAUSD school food issues, in developing education and outreach efforts around the resolution.¹⁶

The campaign for healthier beverages also involved efforts at the state level. In 2001, SB 19, a bill sponsored by State Senator Martha Escutia, was passed by the State Legislature and signed into law by then Governor Gray Davis. Like a number of other related bills, this bill has yet to be implemented due to fiscal constraints and uncertainties at the state level associated with eliminating soda and junk food sales.

However, the LAUSD Healthy Beverages Resolution, also known as “the Soda Ban,” received enormous media attention at the time of its passage in August 2002 and helped stimulate similar policies adopted by school districts around the country. The resolution stipulated the following:

- ❖ Schools are prohibited from selling high caloric, high sugar drinks, including sodas, as of January 2004.
- ❖ Only beverages that meet the nutritional guidelines set forth by the motion can be sold and advertised in vending machines, cafeterias and student stores.
- ❖ Schools cannot make or renew any contract for the sale of non-approved beverages.
- ❖ Only approved beverages can be sold before, during and until ½ hour after the school day ends.
- ❖ The District’s Office of Inspector General will audit schools to monitor compliance.

LAUSD Implementation of the Soda Ban

As part of the efforts to see these changes take place, monitoring (before and after January 2004) of the implementation of the Soda Ban was undertaken. This included a preliminary observational study undertaken in conjunction with the Healthy School Food Coalition and CFJ and an analysis of LAUSD’s approach to implementation.

The observational monitoring involved high school students, teachers, and community members using a survey to identify what types of items were sold in school vending machines, school stores, or foods available during the recess period at twenty-nine schools. Sixteen high schools and middle schools and 13 elementary schools were surveyed between October and December 2003. The results corroborate the analysis undertaken for the Child Nutrition Advisory Committee (Figures 1-4). At the high schools and middle schools, the largest selling items included candy (sold in 100% of the snack vending machines and 93.8% of the student stores), chips (sold in 100% of the snack vending machines and student stores), and sodas (sold in 91.7% of the beverage vending machines). Aside from sales of water, items like whole or cut up fruits

¹⁶ “Challenging the Soda Companies: The Los Angeles Unified School District Soda Ban,” (Los Angeles: Center for Food and Justice, Occidental College, 2002), available at <http://departments.oxy.edu/uepi/cfj/resources/SodaBan.htm>

and vegetables, milk (sold in 15.4% of the beverage vending machines only), or other healthier snacks or drinks were only offered at one third or fewer of the machines.

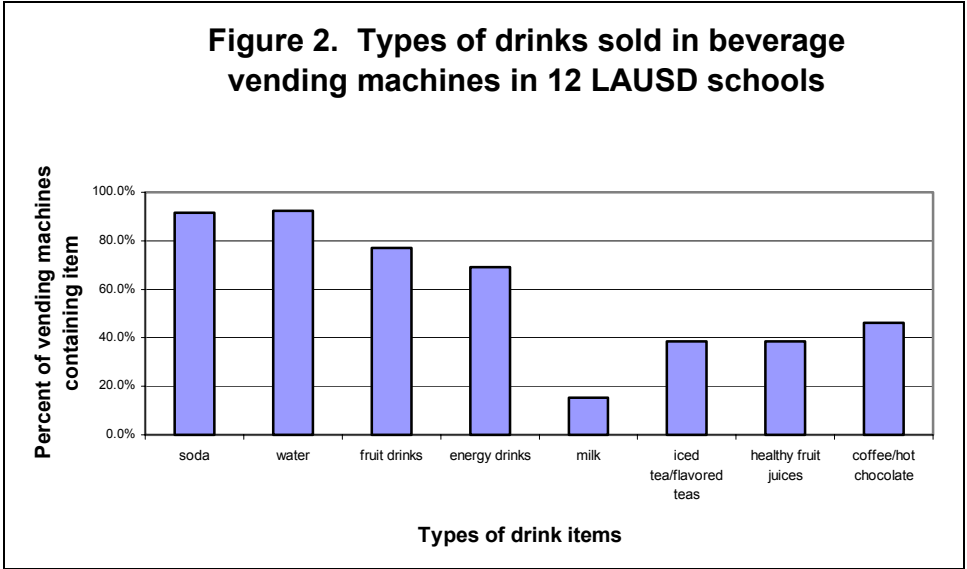
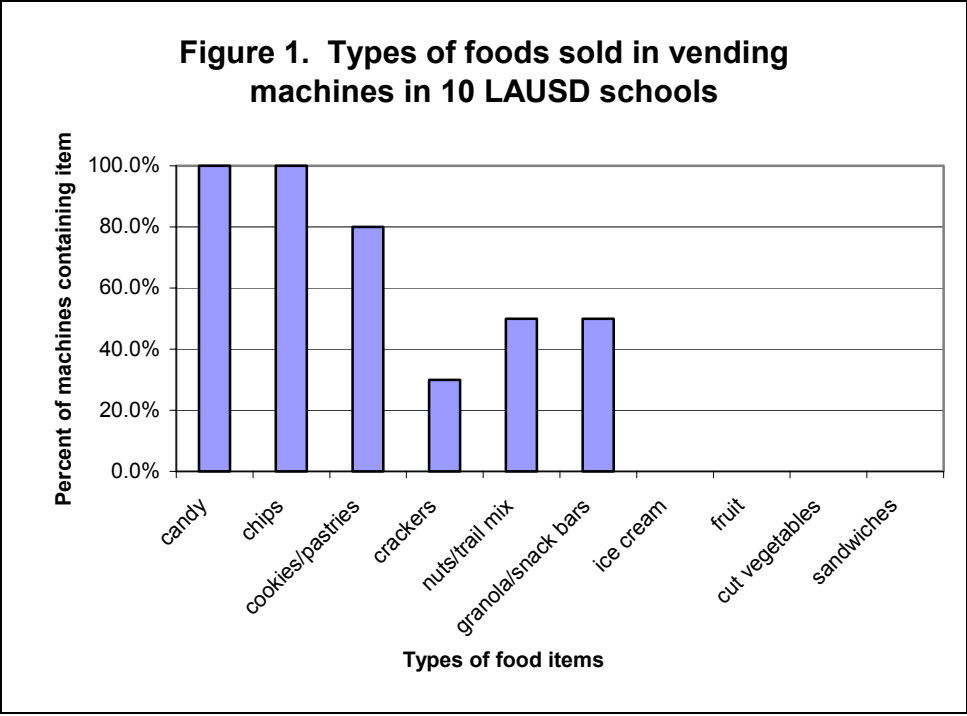


Figure 3. Types of foods sold in student stores in 16 LAUSD schools

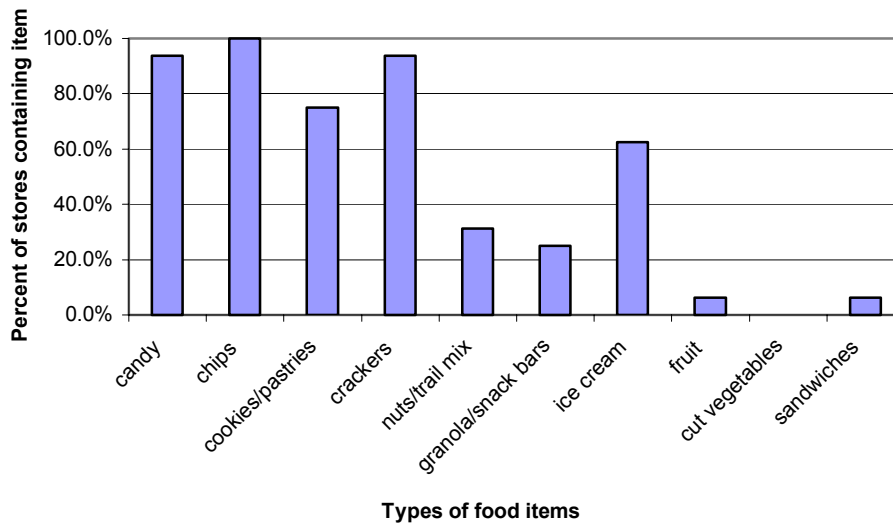
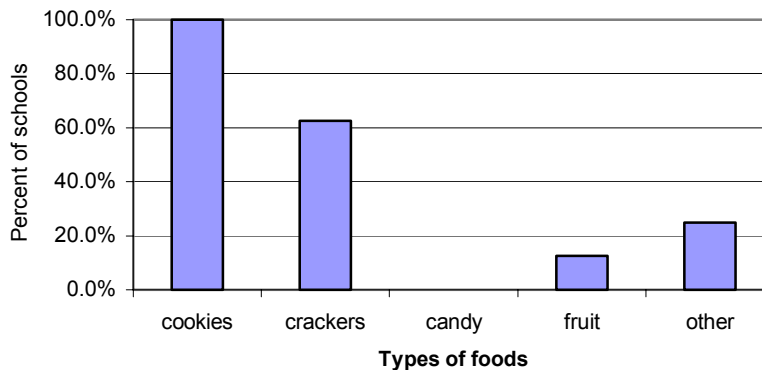


Figure 4. Types of foods offered during recess in 8 LAUSD schools



Prior to the passage of the Healthy Beverages Motion, decisions on beverages in vending machines and student stores in LAUSD middle and high schools were made by the “Student Bodies” of each school, not by the LAUSD school board or other District administration. The Student Body is comprised of three representatives:

1. The student body president and/or student council
2. The school principal and/or a vice principal designated by the principal
3. The school financial managers

The Student Bodies at individual schools had the ability to negotiate beverage contracts with suppliers. Most middle, high, and continuation schools had these contracts. In exchange for

giving a vending company the exclusive right to sell sodas and other beverages in a school for a period of time, the school receive such considerations as cash advances, a percentage of the product sales revenues, computers, athletic scoreboards, free cartons of drinks, etc. Each Student Body is required to report their annual vending income to LAUSD's Budget Services Division.

As of 2003, three corporations accounted for approximately 90% of the contracts between vendors and schools:

- | | |
|--------------------------------------|------|
| 1. Coca Cola | 70% |
| 2. Pepsi | 15% |
| 3. Vending Plus | 5% |
| 4. 7 Up | 2-3% |
| 5. Art's Candy & other small vendors | 7-8% |

Under the State Education code, school boards have the authority to regulate Student Bodies. The new Policy on beverages binds all schools so that, after January 2004, all contracts between schools and vendors must comply with the Healthy Beverages motion.

Following the passage of the motion, LAUSD's Food Services division, Procurement division, Legal Department, and Budget Services Department worked on implementation plans. An extended definition of healthy and unhealthy beverages was established to combine the language of the motion and pre-existing district policies on food dyes and other unsafe food additives, with the possibility that some additional categories, such as herbal supplements like Ephedra, would also be included.

The District established a process for vendors to submit samples and ingredient sheets. This information and the results of an analysis of which beverages meet the criteria were posted on the LAUSD web site. The District also interviewed representatives from several other large school districts, including New York, Chicago, Newark, Denver, and Albuquerque to get information on how these districts handled beverage sales, from both nutrition and business standpoints.

In 2003, LAUSD met with their major vendors (Coke, Pepsi, Vending Plus, and others) to find out how they planned to comply with the new standards and remove soda from campus vending machines. Only three or four of Coke's products met the new standards (Aquafina water and 2-3 juices). The District had speculated that Coke and Pepsi might buy smaller healthy beverage companies to add to their product line, and LAUSD staff suggested this option to the vendors. The soda companies replied that they instead planned to do their own research and development of healthier products, based on the assumption that the move to healthier drinks in schools had now become a national trend. The smaller vending companies that LAUSD talked to more quickly lined up replacement beverages and started partnering with some healthy beverage manufacturers.

Based on their written communications, the District assumed that a 100% compliance rate in removing sodas had occurred within the first months after the soda ban went into effect. The only

exception that the District initially identified through observation was a machine at Hollywood High School that offered Pepsi. That machine was subsequently disabled.¹⁷ However, the vending machine and student store monitoring by members of the Healthy School Food Coalition that has continued after January 1, 2004 indicates that half of the 29 schools previously monitored were not in compliance in the first two months after January 1, 2004, with sodas or other high sugar drinks still sold in student stores or in vending machines. By May 2004, additional monitoring indicated that these schools had removed or replaced the sodas with new beverages in the vending machines, though not in all the student stores.¹⁸

At the same time, in response to one of the Motion's requirements, the District began to establish a direct monitoring process through the Inspector General's Office. Several local nutrition advocacy organizations met with the Office of the Inspector General in June 2004 to provide input to the audit process and share information about the student and parent monitoring that had taken place. According to participants from the June 2004 meeting, it was anticipated that the Inspector General would be proceeding with its mandated compliance audit during summer 2004 and that long-term communication structures to implement additional sweeping nutrition changes would be explored.¹⁹

Prior to the Inspector General's involvement, procedures for implementation were based on written communications. On January 8, 2004, the District sent all principals a short memo summarizing the implementation procedures. On February 4th, the District sent a longer bulletin outlining the healthy beverages motion and the implementation procedures to principals, school financial managers, school cafeteria managers, and local district superintendents, business managers, nursing coordinators, and operations administrators. The District also decided that it could not unilaterally cancel soda contracts and negotiate entirely new contracts mandating healthy beverages, because that would leave schools open to lawsuits from the vendors. In many cases, schools had already spent all the money they were getting from multi-year contracts, and so would not be able to refund cash advances.

Instead, the District decided to establish a set of documents, including a short Contract Amendment Document in the form of a letter to vendors with existing contracts with schools. The letter gave the vendor the choice of amending the contract to supply healthy beverages or canceling the contract. If the vendor did not reply within 10 days to accept the new terms, then the contract would be cancelled. Schools with oral rather than written contracts were told to give their vendors the same choice, and to only renew oral contracts on a month-to-month basis. The District also developed a new contract stipulating the types of beverages allowed to be sold on school campuses, to be sent to Student Bodies for negotiating new contracts when current amended contracts run out. The District expects a broader range of vendors and beverage companies to compete for contracts based on the new standards.

In anticipation of these changes, the District predicted an annual loss of approximately \$.77 million of the average \$1.77 million in revenue (generated annually during the previous two

¹⁷ Personal communication with George Silva, Director of the Purchasing Branch of LAUSD's Procurement Group.

¹⁸ Personal communication with Francesca de la Rosa, August 5, 2004

¹⁹ Personal communication with Matt Sharp, California Food Policy Advocates, August 5, 2005

years. This prediction was based in part on the assumption that students would buy fewer of the new healthier beverages.²⁰ From their national survey of large districts and their internal planning, the District assumed that one way to reduce this shortfall was through sub-district or district wide exclusive beverage contracts, something that LAUSD had not done in the past. In a bulletin to principals and other staff, the district estimated it could reduce the shortfall by at least 14% through collective contracting. Because of the tradition of individual schools negotiating beverage contracts, there was initial resistance to providing the District sole authority to negotiate an overarching contract. But the District convinced one sub-district in early 2004 to sign an exclusive pouring contract as a pilot program. In the Spring 2004, they had also completed a bid proposal to be presented to multiple beverage vendors.

The District anticipated that approximately 30 companies would be interested in bidding for new contracts, including their big existing vendors (Coke, Pepsi, etc) and smaller companies that focus on healthy drinks. The District would like to make this exclusive contract a 3-year arrangement, the maximum allowable under state and district policies. They would require the vendor to report on sales and other information every month. The district would share this information and the other contract terms (signing bonuses etc.) with the other sub-districts, in hopes that all sub-districts could agree to have a district-wide exclusive contract in approximately three years.

As implementation of the Healthy Beverages Resolution has gotten under way, there have been challenges to some of the District's assumptions and concern about the pace and strategies for implementation. Schools participating in a pilot grants program established to test SB 19 standards have disputed the District's initial financial impact evaluation. These schools had already changed vending machine items prior to the implementation of the soda ban. Healthy school food advocates at those schools argued that although shortfalls occurred in the first months of their own implementation, revenues began to increase over time as student familiarity with the new items increased. For example, sales of alternative products at Venice High School have continued to register a net gain in the two years since the products were replaced.²¹ Income from sales has also been correlated to the price of those products, a factor that was not addressed in LAUSD's assessments.²²

Sales revenues may also be influenced by which products are made available and the degree of student participation in selecting new products. This could be done through taste-testings of the new products, an approach utilized in two of the pilot programs. The District's efforts to outreach to students, teachers, and parents, to explain the new policies and next steps and to introduce healthier alternative products, have not been successful to date. School Food Services conducted

²⁰ "Healthy Beverage Sales Motion," Presentation to LAUSD Board on May 8, 2003 by Business Services Division and Financial Planning Division, LAUSD, available at <http://www.lausd.k12.ca.us/lausd/committees/bfat/pdf/soda050803.pdf>

²¹ Venice High School figures available at http://www.nojunkfood.org/policy/success_snacks.html.

²² A study found that lowering the price of healthy items in vending machines, so that prices of healthy items were slightly lower than less healthy items, significantly increased sales of healthy items. Price reductions of 10%, 25%, and 50% on low-fat snacks were associated with 9%, 39%, and 93% increases in sales. "Average profits per machine were not affected" by the price reductions. Source: Simone H. French, et al, "Pricing and Promotion Effects on Low Fat Vending Snack Purchases: the Chips Study," *American Journal of Public Health* 91, 2001.

three community meetings at different schools during the academic year 2003-2004. Meetings averaged only 10 to 15 participants. The meetings focused on how school food services were meeting federal nutrition guidelines and there was little or no discussion of what changes to expect with the soda ban.²³ At the same time, groups that had been instrumental in promoting healthy school food programs and policies, such as the Healthy School Food Coalition and California Food Policy Advocates, were not initially included in any outreach approach.

Difficulties with 1.5-year timeline for implementation of the Soda Ban are occurring even as the District seeks to implement a new and even more sweeping policy that could represent a significant increase in the District's commitment to a healthy school food approach.

Policy Initiatives: Obesity Prevention Motion

On October 28, 2003, the LAUSD board unanimously adopted an Obesity Prevention motion, extending the District's policy approach to improving LAUSD's food environment. Similar to the Soda Ban, a number of healthy school food community and policy advocacy groups, working closely with LAUSD board member Marlene Cantor, successfully mobilized in support of the resolution. LAUSD food service staff and business staff members weighed in on the draft resolution and worked with board staff to alter certain provisions, weakening a number of the original stipulations in the proposal.²⁴ The final motion was nevertheless comprehensive and was largely embraced by all of the key stakeholders inside and outside the district, with one critical exception: the school financial managers. Key components of the Obesity Prevention motion included:

- ❖ As of July 2004, schools are prohibited from selling "junk food" and high fat, high calorie snacks (as defined by specific nutritional guidelines set forth in the motion).
- ❖ Only snacks that meet the specified nutritional guidelines can be sold and advertised in vending machines, cafeterias and student stores.
- ❖ Only the approved snack items can be sold before, during and until ½ hour after the school day ends.
- ❖ 1 vegetarian meal option will be available in the cafeteria, in addition to salad bars.
- ❖ 5 District schools will participate in a pilot program to sell soymilk in the a la carte lines in the cafeteria.
- ❖ 2nd Chance Breakfast (breakfast offered during recess) will be available in every school within 2 years.
- ❖ Food Services must develop a plan to eliminate branded fast-food products from the cafeteria within 3 years.
- ❖ Every school cafeteria will have a salad bar within 6 years, and all high schools will have salad bars within two years.
- ❖ The District will take steps to eliminate stigma attached to participation in the cafeteria meal programs.
- ❖ Food Services are required to develop an outreach plan for regular community input regarding the District's meal programs.

²³ Personal communication with Francesca de la Rosa, August 2, 2004

²⁴ "Sale of Junk Food at School Banned," Cara Mia DiMassa, *Los Angeles Times*, October 29, 2003; personal communication with Francesca de la Rosa.

LAUSD Implementation of the Obesity Prevention Resolution

Initial changes to snack food sales are scheduled to be implemented at the start of the 2004-05 school year. However, plans to implement several of the long-term changes included in the Obesity Prevention motion still remain uncertain, particularly the provisions mandating implementation of salad bars and elimination of branded fast-food products from the National School Lunch Program. During the previous five years, LAUSD introduced 70 conventional salad bars (the majority of those in the first two years), although local, farm-direct sourcing was not pursued despite earlier successful pilots at two schools (see discussion below of the farm-to-school pilots). To reach the target goals of the Obesity Prevention motion, at least 100 additional salad bars must be implemented each year. As the second largest food service department in the country (in number of breakfast and lunch meals served), LAUSD Food Services has established a complex food purchasing, preparation and delivery system to provide over 700,000 meals daily to over 700 sites across 100 square miles. The challenge for the District in implementing the stipulated changes is significant, although its extensive resources and infrastructure could provide the basis for success. In secondary schools, student lunch periods are very short.. The facilities at most secondary schools were built many years ago and the number of students has greatly increased over the years. In some cases, the number of students that must be fed is triple what the facility was designed for.

In the nine months since passage of the motion, implementation plans have been slow to develop (or are non-existent) for what could be a far reaching and in some respects groundbreaking approach to school food and nutrition. Updates from Food Services to the school board to date have not included targeted plans for the introduction of soy milk nor the implementation of salad bars. In addition, the Food Services department has interpreted the school board's mandate on salad bars to mean that it would only add new salad bars "when economics, facility, and staff permit."²⁵ LAUSD Food Service Director Marilyn Wells also indicated in a meeting with farm to school program advocates that, aside from the conventional salad bars, the District has no interest in restarting the successful farm to school programs that have now caught on in several adjacent Southern California school districts.²⁶ Faced with important new mandates, increased attention by community advocates, and a wide range of financial pressures, the Food Services Department has been resistant to developing alliances with community partners and to having outsiders play more of a role in school food changes. But it is of critical importance to the successful implementation of Obesity Prevention motion and Soda Ban that there be a formal mechanism for greater involvement of the growing web of concerned parents, teachers, students and nutrition professionals.

A number of healthy school food advocates have continued to monitor and mobilize around policy implementation. New initiatives, such as the Project CAFE (Community Action on Food Environments), have established strategies to engage students, parents and community members in assessing the food environments in schools and neighboring communities to develop intervention strategies above and beyond the goals of the District's policy measures. It has become clear that the debates over healthy school food policies – and how they can best be

²⁵ Marilyn Wells to Amy Dresser, August 13, 2004, e mail communication.

²⁶ Personal communication with Anupama Joshi, coordinator California Farm to School Program, August 3, 2004

implemented and extended – remain as protracted as ever. These debates, moreover, are taking place in the context of fiscal constraints related to school funding at the state and local levels and the continuing pressure to link financial outcomes to health and learning goals.

Innovative Programs: Farm to School -- School Lunch Strategies

One successful strategy for addressing the obesity crisis through school meals has been farm to school programs that link schools with local farmers and provide a comprehensive nutrition education experience to children to improve dietary patterns. Farm to school programs have spurred the development of educational activities linking classrooms, instructional gardens, school cafeterias and local, sustainable farms. By introducing students to local, fresh and flavorful fruits and vegetables through farmers' market salad bars and similar farm to school cafeteria, and by instituting associated nutrition education activities such as taste testing, farm tours and visits by farmers, a major new healthy school food initiative is taking root in schools scattered across the country.

The farm to school approach was first piloted at McKinley Elementary School in the Santa Monica-Malibu Unified School District (SMMUSD) in 1997. After some initial skepticism by the food service director, strong participation by students, positive revenue generation, and the recognition that SMMUSD began to receive for its innovative program, the District decided to expand the program at all of its elementary, middle, and high schools within three years after its initial pilot.²⁷ The farm to school idea subsequently caught on at a number of other school districts in southern California (and around the State), most notably in the Ventura and Compton Unified School Districts. From an initial pilot in 2000, food service directors in the Ventura region are preparing to extend farm to school during the academic year 2004-2005 to all twenty-five schools in the Ventura Unified School District, all twenty elementary schools in the Conejo Valley Elementary School District, all five elementary schools in the Ojai Valley Unified School District, the Thacher School (a private high school in Ojai), and Thomas Aquinas College in Santa Paula. Produce for the Ventura farm to school program is supplied through the Gold Coast Growers Collaborative, a new distribution entity that could potentially overcome one of the more difficult barriers facing widespread expansion of farm to school programs – farm-related logistics and delivery.²⁸

The rapid expansion of the farmers' market salad bar program has been even more striking in the Compton Unified School District (CUSD), creating a model farm to school program for a low-income school district. CUSD serves meals to 32,550 students in 39 schools. Most of the students in the district are Hispanic (68%) or African American (30.3%) and 94% of its students qualify for free or reduced-price school meals.²⁹

CUSD began the Farmers' Market Salad Bar Program in January 2004. In the first five months of the program, the district added one new salad bar a month (current total of 5), beginning with the

²⁷ Mascarenhas, Michelle and Robert Gottlieb, *The Farmers' Market Salad Bar: Assessing the First Three Years of the Santa Monica-Malibu Unified School District Program*, Urban and Environmental Policy Institute, Occidental College, 2000

²⁸ Personal communication with Anupama Joshi, August 3, 2004

²⁹ Ed-Data Educational Partnership, *Countywide Profile for Los Angeles County, 2002-2003 Fiscal Year*.

elementary schools. The District anticipates rolling out a new salad bar each month until the 2006-2007 academic year when all twenty-four elementary schools will be participating. The CUSD salad bar operates daily as an alternative to the hot lunch. Produce for the salad bar is purchased from The Garden Patch, a nearby farm market that procures the majority of its produce from a family farm in Carson, California. The Garden Patch supplements the harvest from the farm with produce from other Southern California growers and backyard farmers. The produce is delivered to the district warehouse on a weekly basis, where it is then distributed to individual school sites. Plans are also underway to source from individual local farmers selling at nearby farmers' markets.³⁰

CUSD's current food and nutrition-related activities include campus garden projects in 3 elementary schools and 3 cafeteria composting projects that contribute fertilizer to the gardens. Related CUSD programs include "Salad Bar Feature Days" (soup and potato bars in addition to the salad), a nutrition education program in the classroom, teacher in-service training incorporating nutrition education and gardening, a Student Nutrition Advisory Council, and a Harvest of the Month program that brings one type of seasonal fruit or vegetable into the classroom each month. Each school site also operates a Community Outreach Program, in which speakers from community organizations give talks about obesity and associated health risks, the benefits of healthy home-cooked meals, and food stamp and WIC programs.

Farm to school programs can now be found statewide in California, where they have been established in more than 100 individual school cafeterias in 30 school districts. LAUSD has been an exception to this development, despite a highly successful (in terms of student participation) farmers' market salad bar program piloted in two schools during the 1999-2000 school year.³¹ These two schools, 59th Street Elementary School in South Los Angeles and Castelar Elementary School in Chinatown, were among 14 low-income schools (with more than 90% of the students qualifying for free or reduced meals) selected by a UCLA School of Public Health team for an in-depth evaluation of student health and nutrition, conducted during the 1998-1999 academic year. The UCLA researchers found that students were eating an average of a little more than half the recommended servings of fruits and vegetables (2.8/day) and that there were high percentages (50% and more) of students who are overweight or at risk for overweight.³² The Center for Food and Justice at Occidental College worked with the UCLA team to develop an intervention model in two of the 14 schools and to evaluate student participation rates, fruit and vegetable consumption, and other factors associated with the farmers' market salad bar program. After one year, student participation rates remained high (higher than rates in the Santa Monica program and equivalent to the high rates in Compton). In addition, fruit and vegetable consumption among the students surveyed the previous year increased by 40% to an average of 4.2 servings per day. According to the UCLA 24-hour food recall analysis, this was directly due to the farmers' market salad bar program. Throughout the year, enthusiasm for the pilot salad bars

³⁰ Callahan, Colleen, *Expanding the Movement: A Case Study of the Compton Farm to School Project*, Occidental College, available at <http://departments.oxy.edu/uepi/uep/studentwork/Compton.pdf>

³¹ Gottlieb, Robert and Michelle Mascarenhas, "In Reforming Schools, Don't Forget Students' Stomachs," *Los Angeles Times*, December 27, 1999

³² Slusser Wendy and Neumann C. (2001) *Evaluation of the Effectiveness of the Salad Bar Program in the Los Angeles Unified School District* (Los Angeles, School of Public Health, University of California, Los Angeles.)

remained strong among students, parents, and school administrators at both schools. However, a financial assessment was not undertaken since LAUSD was unwilling to provide financial data on the cost of the program in comparison to the unit cost of LAUSD hot meals.³³

Several charter schools in LAUSD have begun to make healthier lunch options available to children using the farm to school approach. Charter schools have the flexibility of operating separately from the centralized LAUSD food service program to introduce these changes. The Los Angeles Leadership Academy (grades 6-9) operates a farmers' market salad bar program serving farm fresh salads to students as a lunch option. A school garden and nutrition education in the classroom complements the program. The Accelerated School (grades K-12), has designed a full fledged kitchen facility to accommodate the cleaning and preparation of fresh produce, and has plans to introduce a farm fresh salad bar in 2004, in conjunction with an integrated nutrition education, gardening and recycling program that actively involves community members and organizations.

Despite the strong success measured by participation, behavior change, and potential health impact, LAUSD discontinued the farmers' market salad bar program after the first year. However, there was a significant increase in the development of conventional salad bars at LAUSD schools – those with produce sourced not directly from farms or through the farmers' market system, but through its traditional purchasing approach. To date, 70 conventional salad bars have been instituted at LAUSD schools, 71% of which are at schools where a separate funding stream (the LAUSD Nutrition Network) had been established through federal pass through nutrition education funds.³⁴ The primary reason provided by LAUSD for discontinuing the farmers' market salad bar program was the difficulty in establishing an effective mechanism for purchasing, invoicing, and delivery of local produce. In Santa Monica, Ventura, and Compton, the school districts (and in Santa Monica's case, the City, which operated the community's 4 farmers' markets) took responsibility for maintaining the program, including the logistics of purchasing and delivery. During the pilot program at the two LAUSD schools in 1999-2000, LAUSD relied on an outside party -- the Center for Food and Justice -- to handle all aspects of purchasing and delivery to its central warehouse, despite LAUSD's own internal organizational capacity. This passive approach and subsequent decision to eliminate the program reflected the skepticism of the food service leadership and LAUSD's own food buyer about the viability of the program, despite the initial findings of the pilot.³⁵

An early draft of the Obesity Prevention resolution included provisions to explore a farm to school model as part of the broader initiative to establish salad bars at all LAUSD schools. During the Board of Education deliberations, district administrators removed this provision. Some board members remain interested in this option, particularly with increasing evidence of the farm to school program's success in other school districts. Evaluations that have been conducted of the model (described below), underline such evidence and provide a strong

³³ Mascarenhas, Michelle, Margaret Haase, and Robert Gottlieb, Los Angeles Fresh Food Access and Nutrition Education Project 1998-2002, A Report to the California Nutrition Network, Center for Food and Justice, available at <http://departments.oxy.edu/uepi/cfj/CFJ%20NN%204%20Yr%20Report%20FULL.pdf>

³⁴ Personal communication with Joanne Stolle, LAUSD Nutrition Network, August 6, 2004

³⁵ Mascarenhas, Michelle et al, Los Angeles Fresh Food Access and Nutrition Education Project 1998-2002

argument for the program's ultimate adoption in LAUSD and all other school districts in California. The state's 12-month growing season and wide variety of seasonal items available at any one time from within the state make the model even more viable.

Evaluations of Farm to School Programs

Long lines at the farmers' market salad bars in more than 100 schools from diverse (in locations and student demographics) school districts across California, and nearly universally high participation rates indicate that a farm to school approach can resonate among both low and middle income students. Students have made healthy choices when tasty and healthy options are available, in spite of the preponderance of evidence that children's viewing of 10,000 junk food advertisements annually has developed strong brand-identity preferences for these foods. Farm to school organizers argue that the complimentary educational components make farm to school programs capable of influencing children's future food preferences and eating habits. A summary of evaluation findings of farm to school programs in California is included below.

Fruit and Vegetable Consumption.

- A 1999 UCLA study showed that students in schools participating in the Farmers' Market Salad Bar program increased daily fruit and vegetable consumption by 40%. There was also an associated increase in fruit and vegetable consumption at other meals (from 2.1 to 2.3 servings/day), and a decrease in total calories, total fat and cholesterol in the daily diet.³⁶
- Through the Winters Unified School District program, children selected an average of 133% of the USDA minimum requirement for fruits and vegetables offered daily in school meals in 2003. This equates to one cup of fruits and vegetables per day.³⁷
- The Ventura Unified School District found that by combining the introduction of farm fresh products in the cafeteria with nutrition education in the classroom, students chose healthy meals 75% of the time, compared to 46% before the educational component was introduced.³⁸
- At one school in Davis USD, the waste stream associated with the cafeteria food was reduced by 47% due to implementation of an integrated waste management program. As a consequence, the school district saved approximately \$2,800 per year, not including reduced labor and equipment costs.³⁹
- In the Santa Monica-Malibu Unified School District, participation in salad bars jumped five fold when the district switched from conventionally sourced salad bars to farmers' market sourced salad bars.⁴⁰

³⁶ Slusser, Wendy, M.D., and Charlotte Neuman, M.D: Report on Findings presented to the Society for Nutrition Education, July 2001.

³⁷ Feenstra G and Ohmart J. Yolo County Farm to School Project Evaluation. Year 1 Annual Report, 2002-03. University of California Sustainable Agriculture Research and Education Program. September 2003.

³⁸ Christensen, H. Juanamaria Healthy Schools Project Final Evaluation Report, Ventura County Superintendent of Schools Office, February 2003.

³⁹ Havstad C and Wheeler L. Final Report of the Davis Joint Unified School District Food Waste Diversion Project. California Integrated Waste Management Board. July 2001.

<http://www.ciwmb.ca.gov/foodwaste/casestudies/contracts/2000/davis.doc>

⁴⁰ Gottlieb R, Mascarenhas M: Evaluation of the Santa Monica Farmers' Market Salad Bar Program. Center for Food and Justice, Occidental College, Los Angeles. 2001.

Results from farm to school programs in California also show that more students participate in the school meal program when farm fresh products are on the menu. At Davis USD, the average school lunch participation over 7 months increased from 26% before the salad bar was introduced to 31.9% after the salad bar was implemented. Since each free or reduced-price meal served increases the districts' revenues from federal reimbursements, an increase in school lunch participation represents an important source of revenue for those districts.

Farm to school has also emerged as a national movement, with a variety of programs now established in 23 states. Passage of new "farm to cafeteria" provisions, as part of the 2004 Child Nutrition Reauthorization legislation, will provide a new funding stream (pending annual Congressional appropriations) for establishing farm to school programs in school districts around the country. A Department of Defense program (DoD Fresh) provides opportunities for school districts to purchase fresh produce at a highly discounted rate through the DoD's existing distribution channels. The California farm to school network has been especially successful through workshops and technical assistance in expanding farm to school beyond a pilot stage. In 2003, regional workshops conducted in Davis and Ventura to showcase local projects were attended by 60 and 140 participants respectively. Both events stimulated interest among other school districts in pursuing a farm to school approach. Four more workshops are planned across the state in the next 2 years. A national farm to school network has also been formed to provide technical assistance to school districts, farmers, and parent and community groups. Plans are underway to establish statewide and regional networks to advocate and facilitate the development of farm to school connections.⁴¹

Despite these advances, there are a number of important though surmountable barriers that impact the expansion and institutionalization of farm to school programs. These include fiscal issues, organizational aspects, including delivery and management of the program, farm product availability and volume, quality control, and consistency, and the organizational culture of both school food services and school districts as a whole. It is the fiscal issue, in which financial bottom line mandates can take precedence over nutrition, health and potential educational benefits of this type of new approach that may constitute the most difficult and important barrier. The issue of barriers will be discussed further in the recommendations section. A key advantage of farm to school has been its success in making fruits and vegetables more accessible and appealing to students. The program described below provides a new model for nutrition education that links students to a local farm and introduces them to farm fresh produce, the farm that grows the food, and encourages them to try new foods.

Innovative Education: The Fresh from the Farm Project

During the 2002-2003 and 2003-2004 school years, a pilot program entitled "Fresh from the Farm" was implemented at a number of low-income schools in LAUSD. The purpose of the program was to provide students the opportunity to taste and learn about farm fresh produce that is grown in Southern California and delivered directly to their classroom. In its first two years, the program served nearly 40,000 students from 2,000 classrooms at approximately 40 LAUSD school sites. Utilizing a model called Community Supported Agriculture that ties consumers directly to a local or regional farm, this LAUSD program established a direct connection between

⁴¹ www.farmentoschool.org

participating classrooms and a Southern California organic farm. The project partners include the Tierra Miguel Foundation farm, the LAUSD Nutrition Network, and the Center for Food and Justice. CFJ helped design the project concept as an extension of the farm to school model, and continues to be part of the program as a facilitator, manager and evaluator.

Since September of 2000, Tierra Miguel Foundation has operated a Community Supported Agriculture (CSA) program in which produce is distributed to an average of 290 subscribers across San Diego, Riverside, Los Angeles and Orange counties. Subscribers, also known as shareholders, purchase a share of the farm produce for a predetermined price, which they pay in advance. Each week the shareholder receives a box of seasonal, certified organic produce. The CSA model of food distribution enables consumers to partner with the farmers who produce their food, sharing in the risks and rewards of food production, and learning (through a weekly newsletter) about farming issues, including organic farming practices. The Los Angeles Unified School District Nutrition Network (LAUSD NN), was the third key player in enabling the program to be established. The LAUSD NN, supported by federal nutrition education funds administered by the California Department of Health Services, supports collaborative nutrition education efforts between teachers, food service professionals, school nurses, parents, administrators, community members and students. The LAUSD NN funds nutrition education programs in about 200 low-income schools in the district. LAUSD NN provides both the framework (through its participating schools) and the funding to support the Fresh From the Farm program.

The program operates as follows. The Tierra Miguel Farm, which leases 87 acres in the Pauma Valley in North San Diego, selects and delivers produce items that are appropriate for learning and sampling activities for school-aged children and adolescents. The farm harvests and cleans the produce, and boxes enough produce to enable students in each classroom (20 per classroom in year one, 25 in year 2 and an anticipated 30 students per classroom in year 3) to prepare and sample each item. There are several different seasonal fruit and vegetable items per box, such as spinach, a mix of many lettuce varieties, broccoli, carrots, oranges, and strawberries. Table 3 illustrates the reach of the program in the first two years of operation.

Table 2. Reach of the Fresh from the Farm Program in Project Years 1 & 2			
Project Year	Classrooms Served	Schools Served	Students Served*
2002-2003	993	41	19,860
2003-2004	980	39	24,500

* Students served is calculated as an estimate based on an average of 20 students per class in year 1 and 25 per class in year 2. The 2004-05 program is prepared to provide up to 1,238 boxes of produce and will also increase the number of students served per classroom to 30, increasing the size of the program by at least 15%.

Evaluation of the Program

For the past two years, a survey of participating teachers has been used to assess the educational effectiveness of the program. The survey results reflect strong support for the Fresh from the Farm program by participating teachers and an overwhelmingly favorable response regarding the program's educational value. The teacher commentaries also indicated that the program served as a learning tool for students in a wide variety of subject areas. Some of the responses also indicated that additional teacher education regarding nutrition, seasonality, sustainable agriculture, and the "5 fruits and vegetables-A-Day" nutrition education message would further extend the goals of the program. In response to teachers' requests for assistance in this area, the LAUSD Nutrition Network developed an additional teacher newsletter with ideas for incorporating the program into a range of curricular areas. Teacher participation in the program and the lessons derived from participation helped reorient the focus on teaching nutrition education and increased interest in further teacher training around the issues of food, farming, and nutrition.

Cost of the Program

For the 2004-2005 academic year, it is anticipated that up to 1,238 boxes of produce will be delivered to participating classrooms, with a per box cost for the program of \$46.86. For 2004-2005, the box size will also increase to allow approximately 30 students to sample the produce. The per-student cost for this activity will then be \$1.56 per student for a class size of 30, 14% less in year 3 than year 1 (Table 3).

Project Year	Cost/Box	Students Served/Box	Cost/Student
2002-2003	36.25	20	1.81
2003-2004	46.86	25	1.87
2004-2005	46.86	30	1.56

Although the cost per box has increased since its first year to support expansion and costs arising from the unexpected complexity of the arrangement, the cost per student has decreased due to the larger number of students participating in the program. In addition, efforts have been made by the LAUSD Nutrition Network to streamline the payment process for the 2004-2005 program year, which could significantly reduce administrative costs that were incurred during the previous two years of the program.

The most significant challenges for this type of nutrition education program are funding and integrating education with complimentary cafeteria programs to support students in making healthy choices. Although funding remains secure in the immediate future through the availability of federal nutrition education funds, it is important to develop the program as a District-wide initiative to expand the benefits to all students and ensure program sustainability. The common disconnection between classroom and cafeteria experiences is a problem that can

be solved with consistent nutrition education messages *and* food environments in the classroom and cafeteria. Subsequently, this connection between classroom and cafeteria will align the cafeteria with the school's educational mission.

Policy and Program Recommendations: Strategies for Implementation and Institutionalization

Each of the areas discussed – innovative policies and programs such as the Healthy Beverages and Obesity Prevention motions, farm to school, and Fresh from the Farm/CSA in the Classroom – are at early developmental stages and need to be scaled up. The recommendations below identify 1) some of the barriers for implementation and institutionalization, and 2) the policy and programmatic initiatives required to overcome those barriers.

Policy Implementation

There are several key concerns about the implementation of drastic policy shifts such as the Soda Ban and Obesity Prevention measures. Significant challenges are posed for implementation and sustainability within such economically stressed organizations as school food services departments. Organizational players (student financial managers, district business managers, food services directors and staff) may be reluctant to implement policy changes if they conflict with long-standing practices based upon deeply held beliefs and assumptions. The potential benefits of healthier diets, such as increased learning capacity and chronic disease prevention are often not quantified nor factored into a cost benefit analysis. This is true of the analysis initially undertaken by LAUSD in implementing the Soda Ban. To compound these challenges, it may be difficult to keep up public attention and pressure on the complex and lengthy process of implementation long enough to see the end goals realized. Furthermore, implementation approaches are likely to generate opposition within the school community if students, teachers, and parents are not engaged in the process of implementation, or supportive of the changes.

The issues of maintaining public interest in the issues and addressing the financial considerations were raised during the August 2002 LAUSD board debate over the soda ban. Board member Marlene Canter, a strong supporter of the Soda Ban, pointed out that two decades earlier there had been a similar resolution, introduced by then school board member Roberta Weintraub, to eliminate sodas from LAUSD vending machines. Though the policy was adopted at the time, it was only partially implemented and then abandoned just a few years later on the basis that schools were losing funding sources for programs that were in danger of being cut. Further, the lack of dedicated revenue streams for many campus activities in the post-Proposition 13 era combined with a lack of firm administrative commitment to healthy school environments also undercut the success of the policy. As a consequence, schools began once again to aggressively identify additional funding sources, reinstating sales of sodas to their students, which ultimately led to a failure to implement the original policy. Given that history, board members Canter, Genethia Hayes, and Julie Korenstein argued strongly at the August 2002 board meeting that financial considerations needed to be separated from the health issues involved, and that relying on student purchases of unhealthy products *as a revenue generator* undermined the goals of the District. In turn, other board members raised concerns about the financial losses that they assumed would occur. Ultimately, the Soda Ban motion passed after LAUSD Superintendent Roy Romer sought to separate the policy intent (a soda ban for health purposes) from the

financial side (with the Superintendent promising a financial evaluation by the District of the impact of a ban). With the District taking a conservative approach that assumes significant financial losses, and with the failure to develop a more aggressive outreach and feedback loop, the District could conceivably face a renewed debate over economics versus health needs.

In the case of the Soda Ban, public attention to the issue has been lengthened by the explosion of media coverage, scientific inquiry, and political interest around weight and health. The LAUSD board action in August 2002 generated widespread national attention and became for many the symbol of a new kind of intervention strategy for the “obesity epidemic,” as it has come to be characterized by public officials and the media. As a consequence, the policy and its implementation are likely to remain a focus of discussion by both policymakers and stakeholders, at least in the near future. In addressing the obesity (and nutrition) issue, LAUSD has maintained a modest though important program (the LAUSD Nutrition Network). However, the District has not supported the development or maintenance of an explicit stakeholder presence around school food issues (as represented for example by its Child Nutrition Advisory Committee which was disbanded in 2002, shortly before the Soda Ban resolution was adopted).

On the financial side, the pressures to reconsider snack and drink items such as candy and sodas as revenue generators will continue to manifest until cost-benefit analyses include nutrition-related health and achievement measures.

Additionally, federal and state reimbursements for subsidized breakfasts and lunches have not kept pace with the exponential cost of preparing those meals. California’s unionized cafeteria workers wages, benefits and workers compensation costs exceeded the 2-3% cost of living adjustment in USDA rate increases. These fiscal pressures are especially acute when decisions are made about on-site preparation of fresh fruit and vegetables. It is substantially cheaper for school food services to mass-produce and distribute pre-packaged lunches, employing lower paid workers to operate ovens and hand out trays, than it is to prepare lunches that include fresh fruit and vegetables.

Financial considerations are also influenced by student receptivity to and support for alternative healthier products as competitive foods and improvements in school lunch menus. Proponent of the Obesity Prevention motion argue that students will select healthier lunches when they are prepared attractively and made easily accessible. Student engagement in issues affecting their choices is a critical indicator for the success. More effective approaches for outreach, engagement, and monitoring are critical and can be facilitated through community and student-based partnerships that insure that policies have a more extensive base of support and ownership.

The following recommendations seek to address the issues of policy implementation as well as opportunities for new policy-based approaches and the need for student and community participation.

- *The Superintendent should develop a food service community liaison structure and an outreach plan to facilitate regular community input and participation in the District Food Service program.* This provision was part of the original Obesity Prevention motion and

was removed on the basis of concerns about 1) the cost of creating a new position, and 2) outside monitoring and influence over the implementation process. However, establishing a community nutrition partnership with a range of stakeholders will support a more dynamic, meaningful, and ultimately successful implementation plan. A partnership that includes mechanisms for engaging interested parents, students and teachers throughout the district could provide an “on the ground” feedback loop to encourage a shift in attitude and buy-in from students, parents and community members.

- *Schools should conduct student taste testings of healthy food products that are not currently offered on campus.* Similar successful pilots at Venice and Monroe High Schools in Los Angeles showed that this is an effective strategy for obtaining student feedback on and improving acceptance of new and unfamiliar food items. As decisions are made about what food items replace soda and junk food in vending machines, students should participate in the decision-making process. With meaningful student participation, the likelihood of policy acceptance is greater.
- *The LAUSD Child Nutrition Advisory Committee should be re-established to monitor and help evaluate the implementation of the Obesity Prevention and Soda Ban motions and to also provide feedback to School Food Services on school breakfast and school lunch issues.* In 2001, the school board passed a Healthy Foods Resolution that called for an analysis of foods served on LAUSD school campuses and the formation of this committee, and ultimately the formulation of a policy that would lead to better health through nutrition for LAUSD students. The committee provided an important forum for community, parent, and student input, and could have become the basis for establishing a district community liaison structure. Revival of this body could serve an important role as the new policies are implemented across the district.
- *Student Nutrition Advisory Councils (NACs) should be developed at each high school to help implement healthy school food approaches, including issues involved with vending machines and student stores.* The handful of student NACs currently operating at LAUSD high schools have been important advocates for healthy school food approaches. Student NACs could also help establish school food assessment tools that would engage students in monitoring their own school (and community) food environments.

Program Implementation: Farm to School and the School Breakfast and Lunch Program

A key consideration missing from the discussion of vended items and competitive foods is the importance of the increasing student participation in school lunch, breakfast and healthy snacks programs. When students purchase foods from vending machines and student stores, which are outside the scope of the food services program, the revenues from such sales usually feed back into the educational system. This raises an important equity issue, namely that students should not be subsidizing a publicly funded school system at the expense of their diet, health, and well-being. Rather, federally subsidized school meal programs should be designed to attract student dollars by providing students with accessible (in terms of time and physical access), affordable, appealing, and healthy meals while eliminating the stigma attached to participating.

To this end, the farmers’ market salad bar and other farm to school approaches have been successfully introduced at a number of school districts in California, including low-income

districts such as the Compton Unified School District. At the local level, school districts have strategized ways to overcome logistical and delivery barriers to increase fruit and vegetable consumption while linking to local agriculture. Through federal programs like the Department of Defense's Fresh and US Department of Agriculture's Community Food Projects Competitive Grants Program, pricing subsidies and funding sources have been established.

Depending on the quality and variety of salad bar items, conventionally sourced salad bars can also provide an important healthy school food option. As the Santa Monica experience indicates, however, conventionally sourced salad bars work best when they are able to provide fresh produce, even if not locally sourced. Ready prepared salad items, including canned and highly sweetened fruits, run the risk of reduced acceptance (i.e., lower participation rates as occurred in Santa Monica) as well as reduced nutritional value. Whether locally or conventionally sourced, salad bars nevertheless provide an important option for students, sometimes not otherwise available.

Although the school lunch program does provide better nutritional choices than most competitive food options, due in part to National School Lunch Program guidelines, the school lunch meal is still subject to criticism. Students in Los Angeles characterize the school lunch program as a "second class" meal or "county food," referring to the entitlement aspect of free and reduced-price meals that is associated with "welfare." The LAUSD Child Nutrition Advisory Committee provided a number of recommendations to address this problem, some of which have been partially implemented. Other recommendations that were developed by the Committee have yet to be implemented and are included in this Report.

The recommendations listed below address the farm to school model program as well as proposals for the overall school lunch program.

- *Improve the Salad Bar program to include farm to school pilots at the subdistrict level.* One way to initiate farm to school programs is to implement the pilot concept at the subdistrict level, where there are advantages of scale (in relation to purchasing and delivery), but where the program could still operate at a more manageable level than for the entire District.
- *Develop and extend opportunities for the DoD Fresh program.* This could be achieved through a coordinated approach between three government entities as follows: the California Department of Education to ensure that locally grown produce is marketed and made available to school districts, the California Department of Food and Agriculture to locate farmers in the state to supply the produce, and the US Department of Defense to work with the above entities to procure and distribute local produce through its distribution system that supplies to schools.
- *Ensure that adequate time is allotted for breakfast and lunch.* The district should develop ways to increase the amount of time students have to eat and socialize during breakfast and lunch. This will help reduce the occurrence of students eating "portable" foods from vending machines and student stores because they do not have time to stand in cafeteria lines and eat a "sit-down" meal.

- *Insure that the provision to investigate innovative ways to deliver and promote fresh fruit and vegetables foods through all venues (school meal programs, student stores, ala carte menus, vending machines) is pursued at the District-wide level.*
- *Improve the image of school meals.* One way to do this is to reduce the perception that free and reduced lunch represents “county food” by wiring all the cafeterias to use electronic swipe cards. Another way is to expand on the district’s efforts to include student taste preferences, ascertained through taste-testings on campuses, as a primary factor in selecting products during bid processes.
- *Evaluate the nutrient profile of school lunches using weighted averages.* Using unweighted analysis (entrees offered) is a much less useful method of profiling students' daily selections than weighted analysis (entrees selected). Despite strong language in a July 9, 2004 letter from USDA encouraging use of weighted averages, LAUSD Food Services Branch does not currently track daily lunch selections to profile students' actual food consumption and is opposed to evaluating menus based on weighted averages.
- *Expand innovative approaches to school breakfast.* LAUSD has taken two important steps to increasing breakfast participation: eliminating co-payment for students in the reduced price meal category and offering breakfast during recess (Second Chance Breakfast). Dozens of California districts are now reaching virtually 100% school breakfast participation by feeding elementary school children in the lowest-income schools breakfast in the classroom. This successful model requires slow and careful implementation to troubleshoot logistics and broaden buy-in across schools, but the results are significant: better attendance, behavior and test scores, and increased fruit and calcium consumption.
- *Evaluate procurement and distribution strategies that will enable the inclusion of fresh, local produce in LAUSD school meals.* For example, work with the existing distribution system to include fresher local foods, or work with an agency acting as a broker or forager to help establish the linkages with local farmers on a pilot basis.
- *Incorporate an emphasis on local food into the educational mission of the LAUSD Nutrition Network.* The Nutrition Network currently includes local farmers where possible in classroom-based nutrition education programs, such as the Harvest of the Month, Fresh From the Farm, and Farmer in the Classroom. Such messages about the role and importance of local agriculture incorporated throughout the Network’s activities would help students recognize the value of local agriculture.

Sustaining Innovative Education Programs

Innovative education programs have been significantly advanced in LAUSD with the development of the LAUSD Nutrition Network. These programs have been especially successful when they involve a direct hands-on approach to issues of food and nutrition and where students have the opportunity to understand not only where food comes from, but they can connect to those who grow food through farm and farmers’ market tours, programs like Fresh from the Farm, and Farmer in the Classroom.

Though not discussed in this Report (see earlier report to the Haynes Foundation: “A Place To Grow and A Place To Learn: School Gardens in the Los Angeles Unified School District”), school gardens offer an invaluable opportunity to connect learning with a hands-on approach to

growing food.

The recommendations listed below are designed to enhance the District's pilot CSA in the Classroom program and further extend the LAUSD Nutrition Network's approach.

Support expansion of the Fresh from the Farm Program

- Reduce barriers to teacher and school participation by simplifying the application and payment process. A cumbersome, complicated and time intensive application process may limit new and returning teacher participation in the program. Increased personnel costs resulting from the need for intensive administrative, assistance and follow-up also limit the number of participants the administrative partner can handle. A new payment model will be piloted in the third project year, and it is expected to reduce paperwork requirements and administrative costs related to the previous payment process.
- *Support teacher participation by establishing nutrition and food systems education as an important subject area and provide model techniques for integrating these subjects into state teaching standards.* Invest more resources into professional education in nutrition and food systems and develop teaching and curricular aids to compliment the use of fresh, local produce in the classroom.
- *Reduce barriers to local, small farm participation.* With the increase in teacher participation that is anticipated to occur with the reduction of the above barriers will come increased demand for produce from local CSA farms. The program could meet increased demand by expanding purchasing to additional farms, which is likely to require that the school district make payments in advance of produce deliveries. Advance payments will allow the participation of smaller farms that need to cover costs at the time of planting instead of fronting the costs themselves.
- *Reduce costs by removing the need for third party participation.* Developing a system through which the LAUSD Nutrition Network and school districts can pay participating farms directly and in advance will eliminate the need for a third party to advance the money to the farm. The cost savings could be directed to increasing the capacity of the LAUSD Nutrition Networks to take on the additional operational tasks of the program, such as scheduling deliveries, developing materials, and administering the evaluation surveys.
- *Expand California Nutrition Network funding eligibility to all schools.* Currently school eligibility requirements limit participation to low-income schools. However, this important funding source for nutrition and food systems education should be extended to all schools so that the reach of these innovative programs is not limited to segments of the student population.
- *Integrate the Nutrition Network Programs* – There is currently a disconnect between the organizations that provide similar services to the LAUSD Nutrition Network. A mechanism is needed to network these organizations and provide important opportunities to pool resources, streamline operations, and generate new ideas and collaborations to further increase the reach, scope and efficacy of nutrition and food systems education in the K-12 school system.

Making it Happen

The issues of competitive foods, school lunch and breakfast programs, and nutrition education need to be seen as inseparable questions. Additional research is needed to document the impact of poor diet on educational performance, as well as health outcomes. A Healthy School approach – in the classroom, in the cafeteria, and in the vending machines or student stores – is critical to a “Whole Schools” approach where the mission of the school extends not only to how students learn but the conditions under which they learn. LAUSD and other school districts in Southern California have taken some important steps along these lines during the past two years. It is imperative, from both a health and a learning perspective, that these steps be effectively implemented, extended, and sustained.