

PLANTING THE SEED



Farm to School Roadmap for Success

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OFFICE OF THE
FIRST PARTNER

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Establishing an equitable, resilient, and scalable California farm to school movement

In 2019, the two of us sat down for a series of in-depth discussions to reimagine the way California feeds its children. While we may come from different backgrounds, we both share the common goal of ensuring that all California kids have access to farm-fresh and nutritious meals that are on the scale towards regenerative.

With this vision in mind, we set our sights on the expansion of farm to school programs, which connect children to locally sourced, whole foods in the cafeteria, classroom, and garden, and provide critical resources to cultivate healthier, climate smart, and more equitable communities. Research indicates that these programs increase children's fruit and vegetable consumption and enhance students' academic achievement. At the same time, they've been shown to boost local economies and positively impact the environment by reducing greenhouse gas emissions and inspiring the next generation of environmental justice champions.

Together, we visited various California schools to hear firsthand from students, school nutrition teams, teachers, farmers, and school food leaders on the frontlines of the farm to school movement. We went to Turlock Unified School District, where we saw students managing school farms and culinary programs and met with school nutrition teams using local produce to cook farm-fresh meals for students. We went to Sierra Orchards in Winters, where we saw organic, regenerative orchards integrating sheep, compost, and cover crops into walnut groves. We visited Three Sisters Gardens and Fiery Ginger Farm in West Sacramento, where we saw how urban agriculture and schools can work together to mentor youth and provide fresh, delicious foods to children in their communities. We also visited Markham Elementary School in Vacaville and Gregory Gardens Elementary School in Pleasant Hill to see first-hand how California Farm to School Incubator Grant Program recipients were using funding to expand scratch cooking, school gardens and develop a culturally relevant food education curriculum.

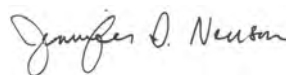


California First Partner Jennifer Siebel Newsom (left) and CDFA Secretary Karen Ross.

When food insecurity skyrocketed during the COVID-19 pandemic, schools transformed into food distribution centers that served entire families, bringing into focus the broader opportunity that farm to school offers. Given the urgent need to provide increased access to healthy meals for kids, the Newsom Administration doubled down on school food, investing an additional \$60 million to expand the California Farm to School Incubator Grant Program and becoming the first state to permanently provide universal school meals.

California—which produces over a third of the nation's vegetables and two-thirds of the country's fruits and nuts—is well-positioned to build upon these efforts and improve child health and well-being through the expansion of farm to school programming. We hope this report will serve as a roadmap for establishing an equitable, resilient, and scalable farm to school movement that nourishes all students and provides schools, families, farms, and the environment the opportunity to thrive.

Thank you for reading.



Jennifer Siebel Newsom
 First Partner,
 State of California



Karen Ross
 Secretary,
 California Department of
 Food and Agriculture

A Farm to School Movement



1912

4-H programs began in California; at the time they were known as "agriculture clubs"

1928



California Future Farmers of America (FFA) founded

1946

National School Lunch Program founded

1978

Life Lab established their first school garden at Green Acres Elementary School in Santa Cruz, CA

1995

Edible Schoolyard and Center for Ecoliteracy founded in Berkeley, CA



2004



California Farm to School Taskforce established

2006

California School Instructional Garden Act (Assembly Bill 1535, Chapter 437, Statutes of 2006) passed, providing \$15 million in new and ongoing school garden funding

California School Garden Network established by California Department of Food and Agriculture (CDFA), California Department of Education (CDE), California Department of Public Health (CDPH), UC Davis, Life Lab, California Foundation for Agriculture in the Classroom, California Integrated Waste Management Board, and Western Growers Foundation



2007

National Farm to School Network established by Urban & Environmental Policy Institute at Occidental College and the Community Food Security Coalition

2009

CDE launched Fresh Fruits & Vegetables: A Centerpiece of a Healthy Environment, Creating & Sustaining Your School Garden, and Garden Enhanced Nutrition Education Training Programs

2010

Healthy Hunger-Free Kids Act of 2010 mandated meal pattern requirements for the National School Lunch Program (NSLP) and authorized the United States Department of Agriculture (USDA) to establish Farm to School Program

2012

Los Angeles Unified School District adopted Good Food Purchasing Program policy



2013



California Farm to School Network founded

USDA Farm to School Grant established, awarding six California grantees in the inaugural class

2017

Karuk Tribe received USDA Farm to School Grant, the first California Tribal organization to receive solo funding

The California Grown Fresh School Meals Grant Program allocated \$1.5 million in one-time funds administered by the California Department of Education to incentivize the purchase of California-grown food in schools and expand the number of freshly prepared school meals offered within the state using California-grown ingredients

2019

California Division of State Architecture approved first-ever formal farm to school cooking school infrastructure: a 4,500 square foot zero net energy facility at Floyd Farm at Leataata Floyd Elementary School in Sacramento



California Farm to School Network transitioned from the Community Alliance with Family Farmers to CDFA Office of Farm to Fork (CDFA-F2F)

2020

First Partner Jennifer Siebel Newsom championed California's first-ever dedicated funding for farm to school in Governor Newsom's 2020 Budget Act, with \$1.5 million allocated in permanent funding for California Farm to School Program and \$8.5 million in one-time funding to pilot the California Farm to School Incubator Grant Program

First Partner Jennifer Siebel Newsom and CDFA Secretary Karen Ross convened the Farm to School Interagency Working Group and Advisory Committee, a diverse cross-section of stakeholders and practitioners engaged in farm to school in California

2021

CDFA-F2F hosted a virtual California Farm to School Conference

CDFA-F2F awarded \$8.5 million to 60 grantees, the inaugural class of the California Farm to School Incubator Grant Program

Governor Gavin Newsom increased the state's investment in the California Farm to School Incubator Grant Program to \$60 million and signed School Meals For All legislation to provide every student in California with free school meals

Our Approach

First Partner Jennifer Siebel Newsom speaks with Vacaville USD students

In 2019, California First Partner Jennifer Siebel Newsom and California Department of Food and Agriculture Secretary Karen Ross first discussed establishing the Farm to School Interagency Working Group in an effort to develop a comprehensive approach to farm to school policy and program development and allow the state to receive feedback and collect recommendations from stakeholders directly engaged in farm to school.

When the COVID-19 pandemic hit in 2020, food insecurity reached unprecedented levels among households with children,^{3,4} and accelerated childhood obesity rates.⁵ With school meals becoming critical lifelines for family meals, the First Partner and Secretary Ross's mission came starkly into view: How can California reimagine the way our children are fed at school?

As a critical first step, they convened the Farm to School Interagency Working Group, composed of state government leaders with jurisdiction over the several intersecting issues impacted by farm to school—the environment, education, health, and labor:

- **JARED BLUMENFELD**
Secretary, California Environmental Protection Agency
- **LINDA DARLING-HAMMOND**
President, California State Board of Education
- **MARK GHALY**
Secretary, California Health and Human Services Agency
- **JULIE SU**
Secretary, Labor and Workforce Development Agency (Former)
- **TONY THURMOND**
State Superintendent of Public Instruction, California Department of Education



To guide a deep dive into these complex issues with Interagency Working Group members, the First Partner and Secretary Ross also established an Advisory Committee consisting of the state's leading farm to school practitioners and food system experts:

- **Rachelle Arizmendi**, Pacific Asian Consortium in Employment
- **Paula Daniels**, Center for Good Food Purchasing
- **Santana Diaz**, UC Davis Health
- **Keir Johnson-Reyes**, Intertribal Agriculture Council
- **Maria Kirlis**, California School Employees Association
- **Kristina Kraushaar**, Rialto Unified Nutrition Services
- **Anna Lappé**, Real Food Media
- **Craig McNamara**, Sierra Orchards
- **Andy Naja-Riese**, Agricultural Institute of Marin
- **Fausat Rahman-Davies**, Rialto Unified Nutrition Services
- **Kathy Saile**, No Kid Hungry California
- **Mohini Singh**, Turlock Unified Culinary Teacher
- **Jai Sookprasert**, California School Employees Association
- **Kat Taylor**, TomKat Ranch
- **Alice Waters**, Edible Schoolyard

Over the course of a year, these committee members led farm to school subcommittees focused on four subject areas—agriculture, education, school food, and research and data. The subcommittees were made up of experts in the field who had direct experience with farm to school programming and included school nutrition directors, school food service workers, agriculture and culinary teachers, school board members, school cooks, farmers, researchers, organizers, and parents.

These subcommittee members hosted learning conversations with stakeholders to hear diverse perspectives on the issues affecting farm to school throughout the state. In total, they held over 100 learning conversations with stakeholders. While these conversations were robust, it was also clear that they did not encompass the experiences of all Californians, especially youth voices. To address this need, CDFA-F2F also hosted 11 roundtable discussions with youth and producers to ensure a comprehensive view of the experiences of farm to school stakeholders at every level of the movement.

Once the learning conversations with stakeholders and roundtable discussions with youth were complete, the advisors and their subcommittee members gathered to analyze themes and outcomes. As with any project of this size and scale, the diversity of voices included meant that there were inevitable differences of opinion and experiences. While this document does not necessarily reflect all the views of each participant, the committee members ultimately developed a shared set of goals, principles, objectives, strategies, and metrics to measure farm to school success, which were presented to the Interagency Working Group.

In total, this report and the recommendations that follow reflect the values, insights, and expertise of the people who live and breathe farm to school every day, highlighting the multisectoral nature of farm to school, and providing a clear path forward for farm to school in California.



Farm to School Impacts

California's agricultural industry is second to none. With over 69,000 farms and ranches and 24 million acres in production,⁶ California produces more than 400 commodities and grows over a third of the country's vegetables and two thirds of the country's fruits and nuts.⁷ At the same time, the state faces tremendous challenges—a climate crisis, public health inequities, and an agricultural industry experiencing unprecedented economic hardships.

Farm to school helps address these challenges by enriching the connection students have with fresh, nutritious food while supporting local food producers and promoting environmental resilience. Through hands-on learning opportunities related to food, health, agriculture, and nutrition, farm to school programs can create a foundation for young environmentalists to better understand the connection between food and Mother Earth. Additionally, farm to school can increase equitable financial opportunities, economic growth, and market diversification for local producers by opening the doors to a billion-dollar institutional market. These efforts can help increase supply and demand for producers that sell organic products or use other climate smart agriculture practices. Moreover, buying fresh foods from local producers and supporting scratch cooking in school cafeterias can create new jobs and strengthen the local economy.

Taken together, farm to school offers a tremendous opportunity to rethink our local, state, and global food systems.



Farm to School and Nutrition Security

First and foremost, farm to school programs increase food access and nutrition security. In 2019, nearly one in seven children in California was food insecure,⁸ a number that likely grew to be about one in five in 2020.⁹ School nutrition teams serve close to six million school meals to California school kids each day,¹⁰ and during the COVID-19 pandemic, roughly one quarter of all low-income families with children in California relied on food from schools to cover food shortages.¹¹

While school nutrition programs are powerful anti-hunger tools on their own, they are even more effective when paired with farm to school strategies. Combined, they increase students' participation in school meals,¹² positively impact students' knowledge related to food and nutrition,¹³ increase students' access to fresh nutritious foods such as fruits and vegetables,¹⁴ and increase their consumption of these foods.¹⁵

For example, research found that farm to school programming in Wisconsin elementary schools increased the quantity of fruits and vegetables available during school lunch by six to 17 percent and boosted consumption of fruits and vegetables by 135 percent among students who previously had the lowest fruit and vegetable intake.¹⁶

Additionally, a FoodCorps evaluation found that schools that provided more hands-on learning opportunities, such as gardening and cooking, had students who ate three times as many fruits and vegetables as students in schools that provided fewer of those opportunities.¹⁷ The ability of farm to school programs to boost fruit and vegetable consumption is especially important given only seven percent of adolescents nationwide meet the United States Department of Agriculture's (USDA's) fruit intake recommendations, and two percent meet the USDA's vegetable intake recommendations.¹⁸

Furthermore, students nationwide who participate in the National School Lunch Program and School Breakfast Program receive 47 percent of their daily calories from school meals.¹⁹ This places even greater emphasis on the need for nutritious foods in schools, which can serve as kids' healthiest sources of food.²⁰

Importantly, farm to school programs raise school meal participation. Riverside Unified School District (RUSD) increased overall participation in school meals, including both student and teacher meals, by nine percent after initiating its farm to school salad bar program in 2005.²¹ Moreover, the students enrolled in the salad bar program at one of these school sites consumed 63 percent more fruits and vegetables during lunch compared to students who picked the hot meal lunch option.²²



Schools that provided more hands-on learning opportunities, such as gardening and cooking, had students who ate three times as many fruits and vegetables as students in schools that provided fewer of those opportunities.

Farm to School and Education

Research shows that farm to school can have positive educational outcomes such as enhanced academic achievement, improved test scores, and support for whole-child development.²³ Farm to school strategies can also engage families, educators, staff, and communities; contribute to greater knowledge among students; and contribute to positive changes in students' attitudes and behaviors.²⁴

When coupled with culturally relevant curricula, farm to school initiatives can also make education more engaging and meaningful for students. For example, the Karuk Tribe used their USDA Farm to School grant funding to develop a K-12 curriculum that incorporated traditional foods, helping students learn how food relates to their cultural heritage.²⁵ One lesson focused on making manzanita berry cider. For the lesson, students gathered manzanita berries; sorted, ground, and sifted them; and then soaked them overnight to make cider.²⁶ This hands-on lesson taught language, social studies, science, and nutrition, while honoring the culture and traditional growing practices of the students and school community. By scaling farm to school educational initiatives throughout the state, programs like these can become available for a greater number of students to experience.

Farm to School and Economic Resilience

By utilizing local food procurement, farm to school programs increase economic resilience within communities. According to the 2015 USDA Farm to School Census, California school districts spent \$167 million on California foods in the 2013-14 school year.²⁷ The ripple effect of that investment is likely far greater due to the increased agricultural impacts coupled with food system investments in labor and workforce development more broadly. For example, research conducted to analyze the impacts of Oregon's farm to school legislation revealed that every \$1.00 schools invest in local food creates \$2.16 in additional economic activity in the state economy.²⁸ For each new job created to produce local foods, this supports about 1.67 additional jobs in the state economy.²⁹ Relatedly, a 2020 study conducted by the Berkeley Center for Cities and Schools found that school nutrition programs that do more scratch cooking hire more employees and offer more full-time job positions.³⁰ Taken together, farm to school can contribute to job opportunities and improved wages for food service staff, promoting economic growth.



Every \$1.00 schools invest in local food creates \$2.16 in additional economic activity in the state economy. For each new job that develops to produce local foods, this supports about 1.67 additional jobs in the state economy.

Farm to School and the Environment

Along with fostering nutrition security, health, education and economic development, farm to school programs also support environmental resilience by helping schools intentionally source and utilize California products that reduce greenhouse gas (GHG) emissions and fight climate change.

In 2020, Governor Newsom established bold goals and increased incentives for California's agricultural sector to be part of the climate solution, providing funding for the agriculture industry to move toward climate smart, regenerative agriculture practices that store carbon in the soil, increase water absorption, reduce GHG emissions, and accelerate the transition to safer, more sustainable pest management.

The CDFA [Office of Environmental Farming and Innovation \(OEFI\)](#) is a mechanism for the state's transition toward a regenerative landscape, administering the Healthy Soils Program, State Water Efficiency and Enhancement Program, Alternative Manure Management Program, and Dairy Digester Research and Development Program, in addition to funding planning and technical assistance for California producers to adopt conservation management practices that benefit the environment.

California's farm to school programs support local procurement that aligns with OEFI's and Governor Newsom's climate resilience strategies. In fact, these programs serve as a powerful tool to build demand and expand markets for producers that use verified climate smart agriculture practices, such as those defined by the USDA Natural Resources Conservation Service (NRCS) and CDFA, or verified climate smart agriculture production systems, including certified organic and transitioning to organic certification systems.

Leveraging the institutional buying power of school food offers tremendous potential to support the environment. The Center for Good Food Purchasing works with institutions to establish supply chain transparency from farm to fork and shift towards a values-based purchasing model that promotes a just and more regenerative food system.³¹ In the past six years, institutions utilizing the Center for Good Food Purchasing policies and programs have shifted \$4.3 million in spending nationwide to producers who conserve and regenerate soil and water to protect wildlife habitats and biodiversity; reduce energy and water consumption, food waste and greenhouse gas emissions; and reduce or eliminate synthetic pesticides and fertilizers.³²

Farm to school programs can also help schools improve climate resilience by managing the full life cycle of food through composting, which helps store carbon in the soil and can reduce methane emissions by breaking down food waste and other organics. CalRecycle funded a grant program to support community composting, and some of the project sites are on school campuses. These sites provide capacity for food scrap recycling, a source of soil fertility for school gardens, where use of compost increases soil's ability to store carbon, improves plant health, and provides valuable opportunities for education and environmental literacy.

Farm to School and Racial Justice

A historical examination of the food system reveals significant systemic inequities caused by structural and institutional racism. Nationally, people of color are more likely to experience food insecurity, hunger, childhood obesity, and diabetes in both rural and urban communities.³³ Specifically, Black and Hispanic households experience food insecurity at a rate at least twice that of White households,³⁴ and American Indians and Alaska Natives are two times as likely to be food insecure as Whites.³⁵ Food insecure persons face uncertain or limited access to adequate food,³⁶ and have 32 percent greater odds than those who are food secure of being obese,³⁷ as well as a higher likelihood than those who are food secure of having type 2 diabetes.³⁸ Additionally, higher food insecurity is correlated with lower consumption of fruits and vegetables,³⁹ which is associated with an increased risk of mortality from cardiovascular disease.⁴⁰

Systemic racism is also evident in land ownership nationally, where Latinos represent 3.2 percent of farm owners, American Indians or Alaska Natives represent 1.8 percent, Black or African people represent 1.6 percent, and Asians represent less than one percent.⁴¹ Additionally, socially disadvantaged farmers and ranchers – defined as those who have been subjected to racial, ethnic, or gender discrimination – represent 19 percent of California's total agricultural producers,⁴² who face various challenges including language barriers and restricted access to land.⁴³

Farm to school programs provide opportunities to address these issues by promoting procurement from socially disadvantaged farmers and ranchers, including BIMPOC (Black, Indigenous, Multiracial, and People of Color) producers; increasing food and nutrition security through school meals; and building connections to the land and the local agricultural community through educational initiatives focused on food and farming.

Farm to school programs can also support racial justice through environmental benefits. For example, by utilizing California's environmental justice mapping tool, CalEnviroScreen, practitioners can identify and provide targeted support to communities that bear a disproportionate burden of multiple sources of pollution and that have population characteristics that make them more sensitive to pollution. According to an analysis of CalEnviroScreen 3.0 data,⁴⁴ there are clear disparities regarding the racial makeup of the communities with the highest pollution burdens and population vulnerabilities in California. The communities most impacted by pollution are disproportionately made up of people of color, particularly Latino and Black people. In fact, one in three Latinos and one in three Black Californians live in the top 20 percent of the most impacted communities. Therefore, supporting farm to school programs in environmentally and socially disadvantaged communities can help offset the impacts of these environmental health disparities.




Black and Hispanic households experience food insecurity at a rate at least twice that of White households,³⁴ and American Indians and Alaska Natives are two times as likely to be food insecure.


Farm to School Goals and Statement of Principles

The California Farm to School Advisory Committee and its subcommittees hosted over 100 conversations with a wide range of farm to school stakeholders and practitioners throughout the state.

200 stakeholders from all 8 regions of California 

40 students with special interest in food and agriculture 

44 institutional food service leaders 

50+ agricultural producers 

11 community roundtables with students, parents, and school leaders 

20 gardeners 

26 community leaders 

37 nutrition and health practitioners 

4 food waste recovery professionals 

24 policy experts 

104 interviewees 

10 marketing professionals 

10 food distributors 

Emerging from these conversations, the following goals and principles provide a framework to support California farm to school programs from the ground up as they grow to serve the entire state.

High Level Program Goals

- 1 Cultivate Equity:**
 Create opportunities for those who have been historically excluded to improve the health and well-being of the people, places, and communities that define California's food system.

- 2 Nurture Students:**
 Engage students with nutritious, delicious, culturally relevant meals that nourish their bodies and minds.

- 3 Build Climate Resilience:**
 Leverage school buying power to support California producers and incentivize agricultural practices that promote climate resilience and environmental sustainability, including organic systems, while educating students on the importance of environmental stewardship and agricultural sustainability into the future.

- 4 Create Scalable and Sustainable Change:**
 Implement policies and dedicate funding to create lasting impacts for local communities.

Principles

- 1 Center the voices** of the students, families, parents, educators, food service workers, producers, Tribes, and community members at the core of farm to school.

- 2 Work collaboratively** to strengthen existing resources, programs, and partnerships instead of replacing or duplicating effective levers of change.

- 3 Help producers** access school markets and adopt climate smart agriculture practices and other regenerative management strategies that increase resilience to climate change, improve the health of communities and soil, protect water and air quality, increase biodiversity, and help store carbon in the soil. These include cover cropping, no or reduced tilling, hedgerow plantings, composting, prescribed grazing, and no or reduced use of synthetic based inputs.

- 4 Build capacity** for school nutrition teams to purchase locally, invest in school kitchen infrastructure, train culinary staff to cook from scratch, and empower school districts to raise the bar for school nutrition programs.

- 5 Measure the impact** through integrated research projects that reflect the multisectoral nature of farm to school programs and their effects on students' lives, the environment, and local economies.

- 6 Heal historical inequities** for producers and communities that have been historically excluded, especially BIMPOC (Black, Indigenous, Multiracial and People of Color), LGBTQ+, women, veteran, and socially disadvantaged farmers, ranchers, and other food producers, as well as low income communities and communities of color that experience reduced access to fresh, nutritious, affordable foods as a result of historical structural and institutional racism that has created inequitable access to the resources they need to thrive.

- 7 Celebrate the foodways** of California's past and present, highlighting contributions from our state's diverse population.

Recommendations & Policy Index

1

Provide Scalable Support Structures for Farm to School Growth

- Permanently Fund the California Farm to School Incubator Grant Program and Build Regional Farm to School Hubs
- Leverage Public-Private Partnerships

5

Strengthen Relationships Between Producers and Schools

- Invest in Regional Marketplace Specialists
- Prioritize Food System Equity and Climate Smart Agriculture

2

Transform School Meal Environments and Experiences in Collaboration with Youth

- Pilot Local Farm to School Staff Positions
- Incentivize School Nutrition Best Practices
- Reward Innovation and Improvement

6

Expand and Create Inclusive Access to School Food Markets for a Wide Range of California Producers

- Leverage Grant Dollars for Equity and Climate
- Establish Equity and Impact Goals
- Transform Food System Infrastructure and Federal Policy

3

Invest in School Food Careers and Scratch Cooking Infrastructure

- Support School Kitchen Infrastructure Funding
- Increase School Nutrition Budgets
- Develop the Farm to School Workforce
- Expand the School Nutrition Support System

7

Change the Culture of School Food through Storytelling

- Share the stories of school food leaders

4

Develop Model Food Education Standards and Expand Youth Leadership Opportunities

- Develop Model K-12 Food Education Standards
- Create Online Accessibility
- Increase Youth and Educator Engagement

8

Establish Consistent Impact Metrics for California Farm to School

- Invest in Evaluation and Research
- Develop an Annual California Farm to School Census

Recommendation **1**

Provide Scalable Support Structures for Farm to School Growth

Demand for farm to school resources and funding continues to grow in California. Governor Newsom's 2020 Budget Act included the first-ever dedicated funding for farm to school, with \$1.5 million in permanent funding for the California Farm to School Network and \$8.5 million in one-time funding to pilot the California Farm to School Incubator Grant Program. Public response to this initial \$10 million investment was tremendous—with application requests for the grant program far surpassing available funds in 2021.

CDFA-F2F funded 60 farm to school projects in the inaugural class. Following this overwhelming interest, and with support from First Partner Jennifer Siebel Newsom and the Legislature, the 2021-22 state budget included additional one-time funds to expand the grant program to \$60 million, which will allow CDFA-F2F to support even more farm to school projects throughout the state.

Permanently Fund the California Farm to School Incubator Grant Program and Build Regional Farm to School Hubs

Building on these existing state investments, the Working Group recommends establishing a permanent and ongoing funding source for the California Farm to School Incubator Grant Program to fund new and expanded projects throughout the state.

As farm to school grantees emerge throughout the state, the Working Group also recommends that CDFA-F2F build regional farm to school hubs to support farm to school grantees and school leaders at the local level with farm to school planning and implementation. This recommendation includes funding full-time, permanent regional farm to school network leads in CDFA-F2F that are based throughout the state and can tailor support to the unique characteristics of each region.

Regional farm to school network leads could support local farm to school planning and implementation, as well as engage local farm to school practitioners in the California Farm to School Network through regional events, technical assistance, toolkit creation, relationship building, peer learning circles, meaningful and significant outreach to and engagement with community organizations and local producers, coordination with local governments and industry, direct outreach to Tribes and Tribal organizations, and related network building activities. Over

time, the network leads could expand the scope of their work to include other food system projects and institutional buyers, like hospitals, food banks, community colleges, and universities that can create local food system “anchors” and support economic development through local food procurement.



Network leads could expand the scope of their work to include other food system projects and institutional buyers, like hospitals, food banks, community colleges, and universities that can create local food system “anchors” and support economic development through local food procurement.

Recommendation **1**

Leverage Public-Private Partnerships

The Working Group further recommends that CDFA-F2F develop public-private partnerships to leverage state and federal funds and complement them with private philanthropy to scale positive impacts in the school food system.

To develop successful partnerships, the Working Group recommends that CDFA-F2F identify specific areas for philanthropic and private sector support, focusing on food safety certifications, school kitchen infrastructure, Tribal farm to school programs, low or no interest loan programs for producers and schools, or additional needs as they are identified.

California can measure the impact of this permanent grant funding, regional network building, and public-private partnership development by tracking:

- ✓ The number of farm to school grantees
- ✓ The number of dedicated regional farm to school staff within CDFA-F2F
- ✓ The number of members within the California Farm to School Network
- ✓ The number of Memoranda of Understanding (MOUs) developed between CDFA-F2F and strategic partners
- ✓ The percentage of grant resources and staff time directed toward schools across California, and particularly in low wealth school districts
- ✓ The number of philanthropic donors engaged
- ✓ The amount of private and philanthropic investment in farm to school target areas



Recommendation **1**

Growth and Scalability

Farm to School Support System

The Working Group recommends that CDFA-F2F strategically partner with community-based organizations, state agencies, local governments, and universities to coordinate regionally and support local farm to school planning and implementation.

1 State Agencies:



- California Department of Food and Agriculture
- California Department of Education
- California Environmental Protection Agency
- California Health and Human Services Agency
- California Labor and Workforce Development Agency

2 California Farm to School Network:



- Regional Network Leads and Value Chain Coordinators
- California Farm to School Incubator Grant Program
- Peer to Peer Learning and Networking

3 County and Regional Organizations:



- County Offices of Education
- Resource Conservation Districts
- University of California
- Agriculture and Natural Resources

4 Local Organizations:



- Tribal Organizations
- Non-Profit Organizations
- Youth-Led Organizations
- Food Policy Organizations

5 Public-Private Partnerships:



- Industry
- Philanthropy
- Creative Partnerships

Recommendation **2**

Transform School Meal Environments and Experiences in Collaboration with Youth

The school meal experience is about more than simply the food on the plate—important factors like students' relationships with school nutrition staff, the cafeteria environment, students' experiences in school gardens or nutrition classes, and the amount of time students have to eat all impact student enjoyment and participation in school meals.

In developing this report, CDFA-F2F staff hosted youth engagement roundtables to better understand how students experience school meals. Students repeatedly reported experiencing a system that was not designed with them in mind. For example, they did not understand how school meal programs operate, school meals felt rushed and loud, and cafeterias sometimes implemented rules prohibiting talking, sitting with friends from other classes, or even sharing food while students ate.

Pilot Local Farm to School Staff Positions

In order to engage students more effectively with school meals, the Working Group recommends using pilot funds to establish and measure the impacts of full-time farm to school staff members at the school district, county office of education, and early care and education levels. These staff would work to redesign students' experiences in the cafeteria by planning and implementing farm to school strategies like “activating” the cafeteria as a learning space, teaching food and nutrition curriculum to students, cultivating school gardens or farms, and partnering with student and community groups.

This recommendation is supported by a 2017 study that looked at the role that FoodCorps AmeriCorps service members play in impacting school meal environments and food consumption.⁴⁵ FoodCorps service members act as a bridge between the school nutrition department and the educational staff, and they deliver hands-on instruction like cooking and gardening and talking to students about the benefits of eating fruits and vegetables. Where FoodCorps service members were present, over 75 percent of schools had measurably healthier school food environments, and the students who experienced more hands-on learning activities were eating triple the amount of fruits and

vegetables than students who received less hands-on learning.⁴⁶ By building on the success of FoodCorps and piloting additional local farm to school staffing models, school districts can ensure students are engaged inside and outside the cafeteria, that their experiences are heard and valued, and that participation and consumption of school meals increases.



Recommendation **2**

Incentivize School Nutrition Best Practices

Additionally, the Working Group recommends that the state support school meal transformation by incentivizing best practices through state grant programs, additional technical assistance, and resource creation like establishing toolkits focused on specific farm to school strategies.

Recommended best practices include:

- ✓ Working in partnership with school nutrition staff and students to develop culturally relevant menu items that reflect the foods of the school community and get youth excited about eating, including Tribal communities' traditional foods, harvest methods, and preparations
- ✓ Utilizing cafeteria layouts that feature salad bars and fresh ingredients
- ✓ Reducing the chaotic feeling of the cafeteria by mindfully initiating students into the cafeteria space
- ✓ Incorporating student voice and choice through student advisory panels and taste tests to help inform menu planning and lunchroom design
- ✓ Assigning roles and responsibilities to students during mealtimes to provide a sense of ownership over their experience
- ✓ Utilizing cafeteria design as a venue for storytelling
- ✓ Collaborating with school district leadership to ensure students have time to eat, as well as time to learn about and engage with the foods they select at mealtimes
- ✓ Scheduling elementary school recess before mealtimes, allowing students to play first and eat second
- ✓ Establishing links between cafeterias, classrooms, and communities through educational projects like Harvest of the Month, educational school meal trays and impact cards, and recognition programs where students, teachers, administrators, and family members gather to share meals
- ✓ Offering plant based and plant forward meals
- ✓ Implementing [SMARTER](#) lunchroom strategies
- ✓ Utilizing share tables that reduce food waste and implementing school composting programs
- ✓ Supporting school nutrition teams to go beyond the USDA's baseline nutritional standards in school meals to set a higher bar for food and nutrition quality

Reward Innovation and Improvement

The Working Group also recommends that CDFA-F2F works collaboratively with state agency partners to develop a California version of the HealthierUS School Challenge. This former federal program was a voluntary nationwide award program established by the US Department of Agriculture to recognize schools exceeding federal and state minimum standards to create healthier environments through the promotion of quality nutrition and physical activity. California could create its own version to support farm to school strategies, expand youth engagement and participation in school meals, recognize schools that are innovating in school nutrition, and provide some level of financial incentive that would promote school participation in farm to school.

Implementing this strategy would bring school meals beyond USDA's baseline "nutritional adequacy" requirements⁴⁷ and create transformational experiences for students to eat, learn, and grow.

CDFA-F2F can measure the impact of these recommendations by tracking the number of school districts, county offices of education, and early care and education centers piloting full-time farm to school staff in school nutrition departments or the equivalent, developing a survey to track utilization of the best practices listed above, and tracking engagement with California's redesigned HealthierUS School Challenge.

Recommendation **2**

Meal Environments and Experiences

Voices from the California Farm to School Network

“

“[I don’t like that lunch is] short because the lines are so long [so] most of lunch is waiting in line; then sometimes you don’t have enough time to eat; then you’re starving in class, and so you bring cookies or snacks because you get hungry in class.”

– High School Student, Sacramento, CA

“

“We would like to have the option to help create the school menu, either by voting on food items or providing suggestions. It would be cool, and I think we would enjoy being able to help prepare and cook the school food.”

– High School Student, Sacramento, CA

“

“Last year [the cafeteria] had a chicken, rice, spicy kimchi wrap and I [ate] kimchi all the time and was really excited to eat it.”

– High School Student, Sacramento, CA

“

“[I’d like] learning how to cook and then [try] it for lunch, like a class before the lunch period.”

– Middle School Student, Richmond, CA

“

“[At home], when trying to be healthy, [I like] salads or noodles or fruit salads; [I] sometimes put honey on fruit salad to make it sweeter... [and put] my Grandma’s grilled chicken in a salad with carrots, spinach, cheese, and ranch.”

– Middle School Student, Richmond, CA

Recommendation **3**

Invest in School Food Careers and Scratch Cooking Infrastructure

School nutrition teams are the heart of farm to school programs. Innovating in the kitchen, sourcing products from local producers, navigating complex regulations, and educating youth about nutrition are just a few of the hats that school nutrition professionals wear.

Because they are pulled in so many directions, school nutrition teams engaged during the development of this roadmap identified significant challenges to carrying out their duties and implementing farm to school. Among them: recruiting and retaining school nutrition staff, building coalitions of support across school boards and the broader community, and navigating old and outdated school kitchen infrastructure.

Support School Kitchen Infrastructure Funding

As a first step to address these challenges, the Farm to School Working Group recommends sustaining school kitchen infrastructure funding to continue restoring school nutrition capacity to prepare delicious, nutritious, and local meals for all students.

A 2020 report by the Berkeley Center for Cities and Schools (CC+S) identified that the vast majority of public school kitchens in California are not designed and/or equipped to scratch cook, a major hurdle in expanding farm to school statewide.⁴⁸ Unlike serving processed, frozen, pre-packaged food in school cafeterias, **scratch cooking requires school kitchen teams to navigate the entire life cycle of food production, from sourcing, storing, and preparing food, to managing pre- and post-consumer food waste.** It also requires physical infrastructure such as food storage and refrigeration, food waste collection containers, food waste prevention software, and transportation for food waste. The report found that school districts with majority White student populations were more likely to scratch cook foods than school districts with majority non-White student populations.⁴⁹ The report also found that districts rely heavily on local funding for kitchen facility and equipment upgrades.⁵⁰ These findings highlight the impact that both economic and racial equity have on farm to school access.

The disparity in school kitchen infrastructure and scratch cooking also has broader economic effects. The CC+S report showed that **districts with high levels of scratch cooking employ more food service workers and more full-time employees compared to districts that do some or little-to-no scratch cooking.**⁵¹ Thus, investing resources to support school kitchen infrastructure can create more and higher-paying jobs.

Key State Investments in 2021

Through the Budget Act of 2021-22, California took important steps forward to improve school food quality and increase food access. Major investments include:

\$60 million

to expand the California Farm to School Incubator Grant Program.

\$150 million

for kitchen upgrades and training for food services employees to promote nutritious foods and healthy food preparation.

\$650 million

for universally free school meals for all California children.

Recommendation **3**

Increase School Nutrition Budgets

The Working Group also recommends increasing state reimbursement for school meals to cover the full costs of production. Currently, state and federal reimbursement rates do not meet the costs of production in California. According to nationwide data released by the USDA in 2019,⁵² school nutrition revenue combined with federal subsidies only covered about 93 percent of the reported costs to produce school lunches, and only about 82 percent of the reported costs to produce school breakfasts.

Given this gap, a study should be conducted to identify the actual reimbursement gap facing California schools. Closing this gap will make sure that schools have the flexibility necessary to implement farm to school initiatives, increase the number of full-time employees, and return to scratch cooking.

Additional state reimbursement for school meals complements California's investment in universally free school meals for all students. Universally free school meals can help reduce stigma around participation in school meals,⁵³ may increase staff capacity by reducing administrative burden, and will ensure all students have access to quality nutrition. Increased state reimbursement rates will enable school districts to purchase higher quality ingredients and increase wages, all of which require an investment greater than the current federal and state reimbursement amounts, in addition to local revenues.



Currently, state and federal reimbursement rates do not meet the costs of production in California.



Recommendation **3**

Develop the Farm to School Workforce

The Farm to School Working Group also recommends that CDFA-F2F work with stakeholders from the California School Employees Association and other labor organizations, school nutrition departments, community college workforce development programs, and state agencies to develop internships, apprenticeships, and pipeline programs to recruit and train the next generation of school nutrition leaders.

At the entry-level, apprenticeship programs can prepare the workforce for a scratch cooking future, and at the management level, pipeline programs can provide an opportunity for mission-driven school nutrition professionals to advance into director-level and other decision-making positions within school nutrition departments.

One possible model emerging in the state is the connection between California Community Colleges, the Chef Ann Foundation, and local K–12 school districts. These partners are working collaboratively to develop an apprenticeship pipeline program through which community college students gain work experience in school kitchens while they learn about institutional food service with a focus on scratch cooking. The program will also include training and instructional support for incumbent workers seeking to up-skill and a fellowship program for mid- to senior-level workers interested in leading scratch cooking school nutrition programs. This program plans to utilize the California Apprenticeship Initiative project, High Road Training Partnership grant funds, and Workforce Development Board funds to attract more workers to school food services, while also supporting the current workforce. By following this model and iterating on its development, these opportunities can expand to serve more apprentices, thereby strengthening and growing the school food workforce.



Apprenticeship programs can prepare the workforce for a scratch cooking future, and at the management level, pipeline programs can provide an opportunity for mission-driven school nutrition professionals to advance into director-level and other decision-making positions within school nutrition departments.

Expand the School Nutrition Support System

Lastly, the Working Group recommends that CDFA-F2F utilize marketing, collaboration, promotion of school wellness committees, direct work with Tribes, and outreach to state agency partners to increase engagement from school boards, school district leaders, producers, and parents. Together, these stakeholders can form coalitions and build collaborative, sustainable, and resilient farm to school programs. If collaboratively implemented, school nutrition departments will be more valued locally, and the opportunity to transform school health will not rest solely on the school nutrition team's shoulders.

California can measure each of these strategies by tracking the number of state and federal dollars invested in school kitchen infrastructure and meal procurement, the number of school nutrition staff trained with culinary skills, the number of people successfully improving their careers through potential pipeline and apprenticeship programs, and the number of farm to school "coalitions" built within the California Farm to School Network.

Recommendation **3**

Food Careers and Scratch Cooking

Scratch Cooking with Napa Valley Unified School District

Napa Valley Unified School District serves over 17,000 students, and almost half of the community qualifies for free or reduced-price meals. For decades, the school district outsourced its school nutrition program. In 2016, parents and school leadership made an investment in school food, passing a \$269 million bond to build a new central kitchen and renovate school site kitchens, transitioning from heat-and-serve products to scratch cooked meals managed in-house. The district made the decision in 2017 to switch away from an outsourced program and create a self-operated, scratch cooked program and hire its first food service director.

The transition is still evolving, but now, Napa Valley Unified scratch cooks 75 percent of school meals, employs over 75 employees, and delivers 12 hours of professional development to its food service workers each year.

This investment in infrastructure and professional development enabled the school district to begin sourcing higher quality local products from local farmers for school meals, develop collaborative projects between the cafeteria and school garden sites, and even expand school meal programs to include breakfast after the bell in addition to school lunch. Not only does breakfast after the bell increase school breakfast participation,⁵⁴ but local farm to school sourcing also increases school meal participation,⁵⁵ which means increased revenue for the school nutrition program,⁵⁶ and thus a greater ability to continue investing in high quality school meals and farm to school programming. Additionally, school garden efforts enhance students' academic achievement and skills development,^{57,58} further demonstrating that investing in school kitchen infrastructure and professional development can have wide-ranging and meaningful impacts.



Recommendation **4**

Develop Model Food Education Standards and Expand Youth Leadership Opportunities

Farm to school may be most recognizable in the cafeteria, but food-focused educational efforts in the classroom and school garden are equally important for farm to school success. In fact, researchers throughout the nation have connected food education efforts and positive educational outcomes.⁵⁹ So why is it so difficult to implement food education in schools?

According to the California educators who were engaged in this roadmap development process, there are three significant barriers to implementing farm to school in the classroom or school garden:

1

Navigating online educational resources and identifying which educational standards those resources meet is challenging, cumbersome, and overwhelming.

2

Funding professional development opportunities related to farm to school educational strategies is difficult and requires imagination and relentless advocacy.

3

Farm to school educational programs often rely on an individual teacher or educator to have success, rather than creating a district-wide culture of farm to school.

Develop Model K–12 Food Education Standards

The Working Group recommends that CDFA-F2F oversee a collaborative process to develop model K–12 food education standards that are culturally relevant and provide every student an opportunity to understand how food impacts health, culture, biodiversity, and climate. These recommended standards should create an inclusive farm to school “umbrella” where educators from different fields of study can gather online, find resources, and align practices. The standards should leverage the lived experiences of students as learning opportunities to celebrate the diverse foodways of California and should be developed with content area teachers, school administrators, and educators from organizations like California Future Farmers of America (FFA), 4-H, Career Technical Education Programs, school gardens

and farms, UC Agriculture and Natural Resources, Resource Conservation Districts, the US Composting Council, and Tribal communities engaged in farm to school. Youth voices are also essential in supporting the development process through roundtables, listening sessions, and leadership programs.

The Working Group strongly recommends that model food education standards work in alignment with existing educational standards and frameworks, and are optional for school districts to pilot and implement. Food education standards need to connect with the existing work of California FFA, California’s health education framework, state content standards, nutrition education, and other relevant initiatives.

Recommendation **4**

Create Online Accessibility

To make sure standards are accessible and easy to navigate, the Working Group also recommends that CDFA-F2F create and manage an online resource hub for educators that includes easy-to-access vetted farm to school resources and standards that connect to the model food education standards.

Once standards are developed and resources are in place, schools that are ready to pilot the standards can utilize CDFA's Farm to School Incubator Grant Program to support implementation, professional development, technical assistance, and ongoing support for the district.

While the model standards will focus on K-12, the Working Group recommends that CDFA-F2F also incorporate resources for Early Care and Education (ECE), before- and after-school programs, and Tribal schools to help children and youth access food education wherever they are in their educational journey. Similarly, the model standards can be embedded within teacher training programs to ensure educators have the support they need to implement them when they enter the classroom.



Increase Youth and Educator Engagement

The Working Group also recommends that CDFA-F2F hire a staff member dedicated to youth and educator engagement to manage this process and support school districts and counties.

By implementing the strategies listed here and expanding the farm to school "umbrella," the state can broaden the impact of farm to school, align educational practices, support educators, and amplify youth voices to create a more organized and accessible farm to school movement.

To track the success of these strategies, the Working Group recommends that CDFA-F2F measure the number of school districts that have adopted the standards; the number of teachers utilizing professional development; the number of youth engaged with standards-based curricula and youth engagement programs; the percentage of youth in nutrition, agriculture, and other food related career technical education pathways who are entering into the workforce; and the number of online resources downloaded and viewed from the farm to school online resource hub.



Recommendation **4**

Education Standards & Youth Leadership

Voices of the California Farm to School Network

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“I think that many teachers are under a lot of pressure to meet the standards. They have a huge amount of responsibility, so I think we need to find ways to make it easier for teachers to incorporate whatever it is they are aiming to teach. If we know that they can hit a science standard or a math standard by cooking in their classroom, then we should make it clear for them!”

– **Rosa Romero**
Urban & Environmental Policy Institute, Occidental College



“

“We need to make sure that they [teachers] are utilizing the resources they have and that are in their community... It comes back down to going out and having the people working in those areas... trying to connect them to their community, what farms are already out there, what programs are already out there, and how can we take advantage of those opportunities? We do tons of professional development for ag education, so why aren't we inviting others to join us? We need to put everything under one umbrella so that people have access to them.”

– **Jackie Ioimo Jones**
California Future Farmers of America

“

“The opportunity to educate students on the impact of agriculture on society through understanding the importance of local food production systems, health and nutrition from a well-balanced diet with minimally processed foods, and the environmental benefits of using climate smart and soil-regenerative agricultural practices, is a tremendously important aspect of the Farm to School program.”

– **Glen Baldwin**
Six O'clock Farms



Recommendation **5**

Strengthen Relationships Between Producers and Schools

The most successful farm to school procurement initiatives are transparent, values-driven, and built on strong relationships between producers and school district buyers. Schools and producers must work together to translate farm production and packing sizes into school meal servings, navigate complex regulations and logistics, and coordinate variable invoicing and payment schedules.

Relationship building is a crucial component of farm to school procurement success, but there are widespread challenges. According to data collected from the first round of California Farm to School Incubator Grant Program applications, of the 46 local educational agencies that received funding to support local food procurement, only four stated they had no barriers or challenges regarding procurement. The remaining 42 entities identified various barriers to participation, with 17 districts and charter schools stating that they need support building relationships with California producers, and 14 stating that they did not have the time to do the research to find that they needed local producers.

Invest in Regional Marketplace Specialists

To ensure producers and school nutrition teams are successful and well equipped to collaborate, the Working Group recommends that CDFA-F2F hire regional farm to school marketplace specialists to establish relationships between producers and schools across California.

These specialists should be tasked with: building relationships with producers, including Tribal producers, and with food system partners like aggregators, distributors, cooperatives, and food hubs; coaching producers on successful farm to school sales models while developing toolkits, templates, and trainings; and increasing opportunities for school nutrition teams and local agriculture producers to build collaborative purchasing relationships through farm tours, field trips, mixers, and showcases.



Recommendation **5**

Prioritize Food System Equity and Climate Smart Agriculture

Regional marketplace specialists should also focus resources and relationship building with food system partners that have been historically excluded from economic development initiatives in the past, like small or mid-sized producers and socially and/or economically disadvantaged California food producers, including but not limited to BIMPOC, LGBTQ+, women, veteran, or Tribal producers.

Similarly, the Working Group recommends that marketplace specialists prioritize relationship building with producers utilizing climate smart agriculture practices, including recipients of grant programs administered by OEFI and farmers or ranchers who utilize verifiable climate smart production systems, such as certified organic producers or producers transitioning to certified organic.

To accurately measure the impact of these recommendations, the Working Group recommends that CDFA-F2F track the amount of funding schools invest in local food purchases supported by the regional marketplace specialists and the types of purchases are made; the number of California producers selling to schools; the number of school nutrition members engaged with field trips, farm tours, mixers, and showcases; the demographics of producers engaged in farm to school; and the percentage of producers in the network that are utilizing or transitioning to climate smart agriculture practices.



The Working Group recommends that marketplace specialists prioritize relationship building with producers utilizing climate smart agriculture practices, such as certified organic producers or producers transitioning to certified organic.

Recommendation **5**

Producer and School Relationships

Indigenous Leadership at Three Sisters Gardens

After being incarcerated for 16 years, Hunkpapa Lakota Tribe Member Alfred Melbourne founded Three Sisters Gardens to serve future generations and reconnect with the land. Although he is a new farmer, Alfred has had success selling to schools because of his strong relationship with local school district buyer Vince Caguin from Natomas Unified. “I didn’t know what to expect at first,” said Caguin, who buys product from Three Sisters Gardens, “but once I got to the farm and talked to Alfred about his work with the kids and the story that comes with his stuff, I knew I had to find a way to add his products to our program.”

From there, using just text messages and phone calls, Alfred and Vince began navigating school food procurement processes, food safety guidelines, and delivery logistics, and shifting school food budgets to create a purchasing relationship. For Alfred, the sales to schools are serving his mission and laying a foundation for his business. “Selling to schools helps me do what I want to do in the community.” He said, “I get to work with kids after school and feed them when they are in school.”

In the future, both Caguin and Melbourne hope to expand their purchasing relationship, and as schools come back to in-person learning following the COVID-19 pandemic, food orders will become more regular and expansive. The key to their success, though, is not simply shared values; it is that they have a trusting relationship and a commitment to each other and their community. Melbourne says, “Vince just showed up out here and tracked me down. He got it all started.”



Recommendation **6**

Expand and Create Inclusive Access to School Food Markets for a Wide Range of California Producers

California school nutrition teams serve close to 6 million school meals to California school kids each day,⁶⁰ but spend an average of just 14.5 percent of their school nutrition department budgets on local products.⁶¹ Expanding farm to school programs will enable school nutrition teams to increase investments in local products, positioning farm to school as a powerful economic engine for local communities.

However, not all producers have historically had ready access to the school food market. School food contracts are often made with companies that can leverage economies of scale, and provide both the volume and products at the lowest unit price, which tends to favor large-scale food producers and distributors.

Leverage Grant Dollars for Equity and Climate

In an effort to level the playing field for small, mid-sized, and socially disadvantaged producers—in particular those who have been historically excluded from economic opportunities—the Working Group recommends that the California Farm to School Incubator Grant Program provide additional points during grant review for school districts that apply and plan to procure products from small or mid-sized producers and socially and/or economically disadvantaged California food producers, including but not limited to BIMPOC, LGBTQ+, women, veteran, and Tribal producers.

The Working Group also recommends that California Farm to School Incubator Grant Program funds incentivize relationships between school districts that plan to procure products from producers utilizing verified climate smart agriculture practices, including recipients of grant programs administered by OEFI and farmers or ranchers who utilize verifiable climate smart production systems, such as certified organic producers or producers transitioning to certified organic. These grant applications should receive additional points during the review process.

“Farms must first be financially sustainable before the farmers can start to think about utilizing other sustainability practices. Schools can help with that,” shared a farmer who participated in a roundtable discussion hosted by the Working Group.



Recommendation **6**

Establish Equity and Impact Goals

The Working Group recommends that CDFA-F2F develop goals around the share of total California Farm to School Incubator Grant Program funding that should be dedicated to producers utilizing climate smart agriculture practices and to small- or mid-sized producers, and socially and/or economically disadvantaged California food producers. **An initial goal of 25 percent and a secondary goal of 40 percent of resources should be allocated to producers using verifiable climate smart agriculture practices, and an initial goal of 25 percent and a secondary goal of 40 percent of resources allocated to small or mid-sized producers and socially and/or economically disadvantaged California food producers, including but not limited to BIMPOC, LGBTQ+, women, veteran, and Tribal producers.**



Transform Food System Infrastructure and Federal Policy

In addition to leveraging California Farm to School Incubator Grant dollars to support accessibility to school markets, the Working Group recommends that the California Farm to School Network continue leveraging state and federal funds to invest in broader food system transformations such as:

- Storage, processing, aggregation, distribution, and food waste infrastructure to increase resilience of local food supply chains and allow producers flexible pathways to the school food market. This includes investments in new facilities and food hubs, upgrades to and maintenance for existing facilities, and energy efficiency for school food system infrastructure, as well as investments in workforce and economic development.
- Food safety certification for farmers, including Food Safety Modernization Act (FSMA) and Good Agricultural Practices (GAP) certification.
- Solutions identified in [CDFA's Farmer Equity](#) report to create a more equitable food system—improving land tenure and land access, language accessibility, engagement with agriculture industry boards/commissions, and access to available resources and programs for socially disadvantaged producers.
- Climate smart agriculture incentive programs within CDFA's Office of Environmental Farming and Innovation (OEFI) to help more farmers adopt practices that are beneficial for the environment and store carbon in the soil.
- Solutions that lead to increases in local donation of excess edible food.

Recommendation **6**

And, the Working Group recommends the State advocate for shifts in federal policies that would empower California schools to invest funds locally and equitably, including:

- Submitting a waiver for USDA review and consideration to allow California schools to accept cash in lieu of commodities within the National School Lunch Program to move away from commodity products.

- Advocating for improved nutritional standards for school meals, especially reducing added sugar.

- Advocating for permanent and ongoing funding for the Fresh Fruit and Vegetable Program (FFVP), emphasizing fresh and local foods.

- Advocating for Department of Defense (DOD) Fresh and USDA Foods to prioritize procurement and availability of climate smart foods, and foods sourced from small or mid-sized producers and socially and/or economically disadvantaged California food producers, including but not limited to BIMPOC, LGBTQ+, women, veteran, and Tribal producers.

- Simplifying the process for procuring local foods, including Native foods produced through traditional foodways.

- Advocating for USDA to allow school food to be donated to students after the course of regular school mealtimes, in alignment with the California Good Samaritan Act of 2017 that allows for direct donation to individuals.



California can measure the impact of these strategies by tracking: The number of schools purchasing from small or mid-sized producers and socially and/or economically disadvantaged California food producers, including but not limited to BIMPOC, LGBTQ+, women, veteran, and Tribal producers; The number of climate smart and organic producers engaged in farm to school programs; The number of California Farm to School Incubator Grant dollars invested in these subsets of producers; The additional state and federal dollars invested in further food system development.

Recommendation **6**

Access to School Food Markets

Asian Business Institute and Resource Center, Fresno, CA

With support from a CDFA Farm to School Incubator Grant award, the Asian Business Institute and Resource Center (ABIRC) in Fresno is developing a “Farmers Advocating for Regional Markets (FARM)” project, which will work to overcome the numerous challenges socially disadvantaged producers face when accessing the school food marketplace for the first time.

Working collaboratively with Fresno Unified School District, the Office of the Fresno County Superintendent of Schools, the African American Farmers of California, and socially disadvantaged “micro-producers” in the Central Valley, the FARM project will provide layers of technical assistance for farmers, including:

- ➔ Relationship building between farmers and the school district
- ➔ Crop planning to align with school calendar
- ➔ Food safety training and certification to meet school requirements
- ➔ Paperwork, business practices, and record keeping support
- ➔ Culturally responsive communications

Once products reach the cafeteria, Fresno Unified will invite ABIRC and its farmer partners to the school sites to talk with students about the food they’ve grown, lead demonstrations, conduct taste tests, and share stories about their careers in agriculture. Rather than school food procurement remaining behind the scenes in the cafeteria, producers will be honored face to face.

ABIRC’s model program shows the layers of support needed to enable socially disadvantaged producers to access the school food market, and how farm to school programs can support food producers financially and relationally.



Recommendation **7**

Change the Culture of School Food through Storytelling

California First Partner visits Vacaville USD

The California Farm to School movement is made up of a diverse combination of schools, community members, and advocates. At schools, farm to school coalitions include everyone from superintendents to facilities staff, and most directly engage students, school nutrition teams, educators, and school site administrators. In the community, farm to school stakeholders include parents, grandparents, and other guardians, neighbors, local producers, Tribal producers and Tribes, school garden support organizations, and food system partners like distributors and aggregators. And farm to school advocates include organizations scaling from the grassroots community level to an international scale.

While this coalition is broad, communications are not centralized in any one place. For example, school nutrition directors may gather as part of the Center for Ecoliteracy's California Food for California Kids Network or as part of the Center for Good Food Purchasing Program, while the next generation of producers may be organized at the county level through the California Farm Bureau's Young Farmers and Ranchers groups. Similarly, **educators often do not know where to go to find resources they need to implement farm to school interventions and have to turn to the internet to find what they need. The result is a communications gap among key stakeholders—there is no centralized place to build networks and relationships, share best practices, and develop a cohesive narrative around farm to school.**

School food's divisive reputation as something undesirable also leads to challenges with communications and network building. While there are many competing ideas about how to "fix" school lunch, there isn't one consistent narrative shared about an integrated solution for school meal transformation. **Communicating the successes of farm to school programs can help create a culture of school meal successes, attracting like-minded individuals to the farm to school movement who believe that school meals can be nutritious, delicious, culturally relevant, scratch cooked, and a valued part of the school community.**



Therefore, the Working Group recommends that CDFA-F2F develops and implements an intentional communications and storytelling strategy focused on changing the culture of school food and keeping the movement organized, inspired, and engaged.

Recommendation **7**

Targeted engagements and approaches may include:

- Creating a communications strategy that utilizes innovative and traditional storytelling via e-newsletters, blog posts, social media posts, pictures, and videos to engage key stakeholders in school food system transformation; reduce stigma around school meals; support educational efforts to connect the cafeteria, classroom, and community; and increase school meal participation.

- Leveraging creative partnerships with high profile partners, chefs, and advocates to engage new and diverse audiences with farm to school, especially for Native communities and partners.

- Welcoming youth and the California Farm to School Network to play an active role in crafting narratives and telling their stories.

- Developing toolkits and customizable templates for school nutrition programs and partners to amplify California Farm to School Network messaging.

The Network can track quantitative metrics like the number of viewers engaged; audience engagement through “likes,” “shares,” and tags; as well as qualitative measures like viewer actions based on communications. By analyzing this data, CDFA-F2F will be able to see if the messages are leading to action, or passively “updating” the network.



Recommendation **7**

Culture Change and Storytelling

Voices of the California Farm to School Network

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“I think there are a lot of leaders and people who have been part of this farm to school project that I didn’t even know existed—and I’m an Ag teacher. I think we [the farm to school movement] maybe need better advertising or to be put out there more to teachers to feel like they have a better connection to the movement.”

– **Theresa Noga**, Ferndale High School

“

“Communication—helping farmers learn about the opportunity to bid and helping schools connecting with farms is a challenge.”

– **Round Table Participant**

“

“Thank you for creating this meaningful opportunity to advance Farm to School procurement and education that will ultimately help nourish students with quality food and engaging lessons that grow stronger, healthier bodies and minds.”

– **Encinitas Community Educator**

“

“This represents a wonderful and much needed step forward in bringing better nutrition to our K-12 students AND improved income for small farmers! Thank you for making it possible.”

– **Yolo County Farm to School Advocate**

“

“I support [farm to school] because as a parent and having had a career in public education, I can see the benefits that this program will bring to schools, to students, to communities, and to our independent farmers. I hope this program will receive the required support to expand statewide.”

– **Yolo County Farm to School Advocate**

“

“Outreach, community input, workshops, informational pamphlets/videos/social media - our families and scholars need to be reached out to.”

– **Round Table Participant**

“

“School food is delivering exactly what it was designed to deliver. If we can use farm to school to change the mindsets and culture around school food, then we can redesign the whole system.”

– **Vince Caguin**,
Natomas Unified School District

Recommendation **8**

Establish Consistent Impact Metric for California Farm to School

Because farm to school programs exist at the intersection of nutrition security, public health, education, economic resilience, environmental stewardship, and racial justice, it can be difficult to measure their impact and growth over time. While the USDA Farm to School Census provides insights, it does not establish a holistic view of farm to school impacts throughout the state on a regular basis. Moreover, the broader research on farm to school programming is limited, with existing research citing limitations such as lack of longitudinal design, narrow geographic and market scope, and reliance on self-reports of dietary behaviors.⁶³

“

The broader research on farm to school programming is limited, with existing research citing limitations such as lack of longitudinal design, narrow geographic and market scope, and reliance on self-reports of dietary behaviors.

Invest in Evaluation and Research

CDFFA-F2F's California Farm to School Incubator Grant Program is a perfect opportunity to partner with an independent third party such as a California public academic institution to gather data to inform program implementers, decision makers, and the public about the overall value of the initiative; fill research gaps and blind spots; develop best practices; identify barriers to farm to school implementation; and ensure that farm to school investments are fulfilling their potential. Therefore, the Working Group recommends that CDFFA-F2F utilize up to 10 percent of program funding to expand the evaluation of the California Farm to School Incubator Grant Program. The evaluation will seek to measure return on investment from the state's budget allocation for farm to school programming, ensuring resources are allocated as intended to achieve stated goals and objectives, and to identify barriers to implementation, best practices, and effective strategies for farm to school success.



Recommendation **8**

Develop an Annual California Farm to School Census

In addition to investing in evaluation for the California Farm to School Incubator Grant Program to provide case studies and “deep dives” into the impacts of farm to school, the Working Group recommends that CDFA-F2F identifies ongoing funding to develop and administer an annual California Farm to School Census, which will collect information from school districts more broadly, and measure the following data points:

- Number of districts with farm to school programs
- Number of farm to school programs in Socially Disadvantaged Communities
- Number of school gardens and school farms
- Number of on-site school composting programs
- Number of farm to school participants in Tribal communities, including Tribal producers, and in Tribal schools
- Number of farm to school coordinators and educators in schools and districts
- Number of districts utilizing Food Education Standards
- Number of schools utilizing farm to school educational interventions like Harvest of the Month or other similar practices
- Percentage and value of products purchased from California producers
- Percentage and value of products sourced from producers using climate smart agriculture practices
- Percentage and value of products sourced from small or mid-sized producers and socially and/or economically disadvantaged California food producers, including but not limited to BIMPOC, LGBTQ+, women, veteran, and Tribal producers
- Percentage of schools using scratch cooking techniques
- Percentage of schools that lack adequate facilities/ equipment for scratch cooking
- Pounds of school food diverted from waste stream and donated to community
- Amount of school district and other local investment in school nutrition programs
- Financial viability of school nutrition programs
- Financial viability of producers who sell to school nutrition programs
- Farmland Acreage dedicated to farm to school production
- School meal participation rates
- Fruit and vegetable consumption among students
- Number of school nutrition jobs

Once CDFA-F2F collects data through the California Farm to School Incubator Grant Program evaluation and the California Farm to School Census, the Working Group recommends that CDFA-F2F inform the public about the impacts and findings. Developing a communications strategy to disseminate information to stakeholders is also key in expanding adoption of farm to school practices in the future.

CDFA-F2F may add impact measures to the annual census, which should be created and refined through a collaborative process with the California Farm to School Network. California can measure success of the census by tracking the percentage of schools that complete the annual census, and by analyzing census figures.

Recommendation **8**

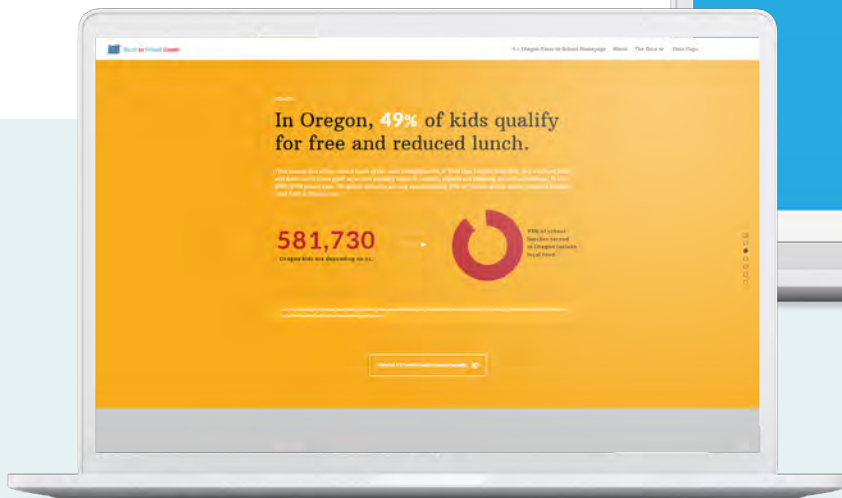
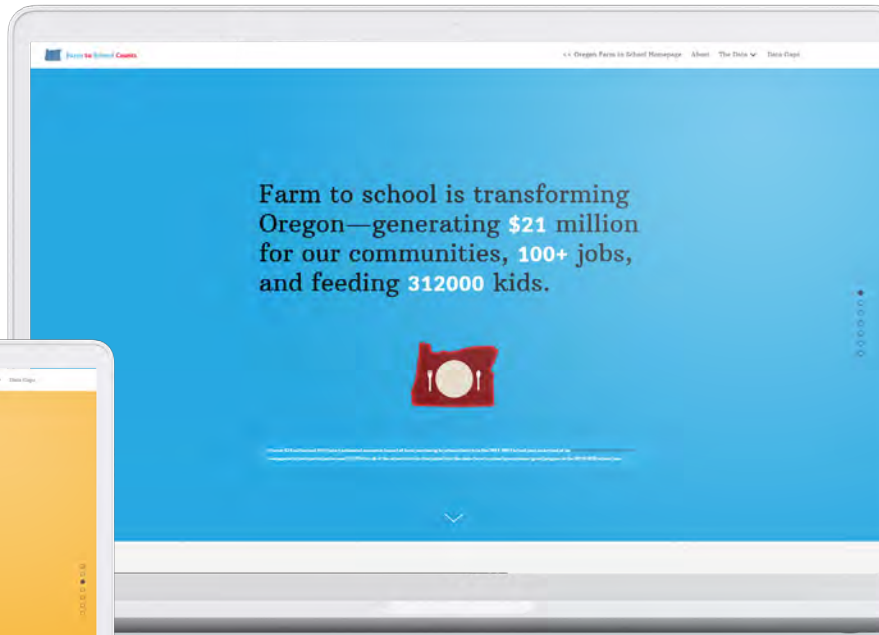
Measurable Impact

Farm to School Counts in Oregon

The Oregon website Farm to School Counts,⁶⁴ developed by the nonprofit organization Ecotrust in partnership with the Oregon Farm to School and School Garden Network, provides an online access point for farm to school data in the state of Oregon. Whether you are a school gardener, administrator, school nutrition director, elected official, advocate, or educator, anyone can visit the website and see up-to-date information on the impacts of farm to school.

Centering impact measurements on public health, environmental quality, farm to school education, and community economic development, the website aggregates data to educate the community about the ways farm to school shapes the state.

As a communications tool, an accountability measure, and a coalition gathering point, the website is a model that California should follow.



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If you are inspired, have questions, or want to get involved in the California farm to school movement, email cafarmtoschool@cdfa.ca.gov.

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Reference List

1. The Benefits of Farm to School. National Farm to School Network. <http://www.farmtoschool.org/Resources/BenefitsFactSheet.pdf>. Updated May 2020. Accessed July 23, 2021.
2. See reference #1.
3. Ahn S, Norwood FB. Measuring Food Insecurity during the COVID-19 Pandemic of Spring 2020. *Applied Economic Perspectives and Policy*. 2020;43:162-168. <https://doi.org/10.1002/aep.13069>
4. Coleman-Jensen A, Rabbitt MP, Gegory CA, Singh A. Household Food Security in the United States in 2020, ERR-298. U.S. Department of Agriculture, Economic Research Service. <https://www.ers.usda.gov/webdocs/publications/102076/err-298.pdf?v=4536.9>. Published September 2021. Accessed October 5, 2021.
5. Lange SJ, Kompaniyets L, Freedman DS, et al. Longitudinal Trends in Body Mass Index Before and During the COVID-19 Pandemic Among Persons Aged 2-19 Years – United States, 2018-2020. *MMWR Morbidity and Mortality Weekly Report*. 2021;70:1278-1283. <http://dx.doi.org/10.15585/mmwr.mm7037a3>
6. California Agricultural Statistics Review 2019-2020. California Department of Food and Agriculture. https://www.cdfa.ca.gov/Statistics/PDFs/2020_Ag_Stats_Review.pdf. Accessed October 18, 2021.
7. California Agricultural Production Statistics. California Department of Food and Agriculture. <https://www.cdfa.ca.gov/Statistics/>. Accessed October 18, 2021.
8. Child Food Insecurity in California Before COVID-19. Feeding America. <https://map.feedingamerica.org/county/2019/child/california>. Updated 2019. Accessed July 23, 2021.
9. State-by-State Resource: The Impact of Coronavirus on Food Insecurity. Feeding America Action. <https://feedingamericaaction.org/resources/state-by-state-resource-the-impact-of-coronavirus-on-food-insecurity/>. Updated March 29, 2021. Accessed July 23, 2021.
10. Nutrition. California Department of Education. <https://www.cde.ca.gov/ls/nu/>. Updated October 22, 2020. Accessed July 23, 2021.
11. Danielson C, Gao N, Malagon P. Food Insufficiency and School Meals during COVID-19. Public Policy Institute of California. <https://www.ppic.org/blog/food-insufficiency-and-school-meals-during-covid-19/>. Published May 24, 2021. Accessed July 23, 2021.
12. New USDA Data Show Growing Farm to School Efforts Help to Reduce Plate Waste, Increase Student Participation in Healthier School Meals Program. United States Department of Agriculture. <https://www.usda.gov/media/press-releases/2015/10/20/new-usda-data-show-growing-farm-school-efforts-help-reduce-plate>. Published October 20, 2015. Accessed July 23, 2021.
13. Prescott MP, Cleary R, Bonnano A, Costanigro M, Jablonski BBR, Long AB. Farm to School Activities and Student Outcomes. *Advances in Nutrition*. 2020;11(2), 357-374. <https://doi.org/10.1093/advances/nmz094>
14. Bontrager Yoder AB, Liebhart JL, McCarty DJ, Meinen A, Schoeller D, Vargas C, LaRowe T. Farm to Elementary School Programming Increases Access to Fruits and Vegetables and Increases Their Consumption Among Those With Low Intake. *Journal of Nutrition Education and Behavior*. 2014;46(5), 341-349. doi:10.1016/j.jneb.2014.04.297
15. See reference #1.
16. See reference #14.
17. Koch P, Wolf R, Contento IR, Tipton B, Gray H, Trent R, Graziose M, Uno C. FoodCorps: Creating Healthy School Environments. Laurie M. Tisch Center for Food, Education & Policy, Program in Nutrition, Teachers College, Columbia University. <https://www.tc.columbia.edu/media/centers/tisch/FoodCorps-Report-FINAL-08-30-17-v5.pdf>. Published February 2017. Accessed June 30, 2021.
18. Lange SJ, Moore LV, Harris DM, Merlo CL, Lee SH, Demissie Z, Galuska DA. Percentage of Adolescents Meeting Federal Fruit and Vegetable Intake Recommendations – Youth Risk Behavior Surveillance System, United States, 2017. *MMWR Morbidity and Mortality Weekly Report*. 2021;70, 69-74. <http://dx.doi.org/10.15585/mmwr.mm7003a1>
19. Cullen KW, Chen TA. The contribution of the USDA school breakfast and lunch program meals to student daily dietary intake. *Preventive Medicine Reports*. 2017;5, 82-85. <https://doi.org/10.1016/j.pmedr.2016.11.016>
20. Liu J, Micha R, Li Y. Trends in Food Sources and Diet Quality Among US Children and Adults, 2003-2018. *JAMA Network Open*. 2021;4(4), e215262. <https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2778453>
21. Joshi A, Azuma AM. Bearing Fruit: Farm to School Program Evaluation Resources and Recommendations. FoodCorps. <https://foodcorps.org/cms/assets/uploads/2016/12/bearing-fruit-farm-to-school-program-evaluation-resources-and-recommendations-farm-to-school-program-evaluation.pdf>. Published 2009. Accessed October 5, 2021.
22. See reference #21.
23. See reference #1.
24. See reference #1.

25. Farm to School in Native Communities. National Farm to School Network. <https://www.farmtoschool.org/our-work/native-communities>. Accessed October 15, 2021.
26. Karuk Tribe. Making Manzanita Berry Cider [Video]. Sipnuuk.karuk.us. <https://sipnuuk.karuk.us/digital-heritage/making-manzanita-berry-cider-video>. Published September 18, 2018. Accessed October 26, 2021.
27. About the Data: 2015 Farm to School Census State / National Summary. USDA FNS Farm to School Census. <https://farmtoschoolcensus.fns.usda.gov/census-results/about-data>. Accessed July 23, 2021.
28. Upstream Public Health. Health Impact Assessment: HB 2800 Oregon Farm to School and School Garden Policy. Issuelab.org. <https://www.issuelab.org/resources/12943/12943.pdf>. Published May 2011. Accessed June 30, 2021.
29. See reference #28.
30. New CC+S Study: Are California Public School Kitchens Scratch-Cooking Ready? Center for Cities and Schools. <https://citiesandschools.berkeley.edu/blog/are-california-public-school-kitchens-scratch-cooking-ready-new-ccs-survey-of-schools>. Published November 13, 2020. Accessed July 23, 2021.
31. Who We Are. Center for Good Food Purchasing. <https://goodfoodpurchasing.org/about-the-center/>. Accessed July 23, 2021.
32. Impact. Center for Good Food Purchasing. <https://goodfoodpurchasing.org/impact/>. Accessed July 23, 2021.
33. Advancing Racial and Social Equity. National Farm to School Network. <http://www.farmtoschool.org/equity>. Accessed July 23, 2021.
34. Odoms-Young AM, Bruce MA. Examining the Impact of Structural Racism on Food Insecurity: Implications for Addressing Racial/Ethnic Disparities. *Family and Community Health*. 2018;41(Suppl 2 Food Insecurity and Obesity), S3-S6. <https://dx.doi.org/10.1097%2FFCH.0000000000000183>
35. Blue Bird Jernigan V, Huyser KR, Valdes J, Watts Simonds V. Food Insecurity among American Indians and Alaska Natives: A National Profile using the Current Population Survey–Food Security Supplement. *Journal of Hunger & Environmental Nutrition*. 2017;12(1), 1-10. <https://doi.org/10.1080/19320248.2016.1227750>
36. Definitions of Food Security. U.S. Department of Agriculture, Economic Research Service. <https://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us/definitions-of-food-security/>. Updated September 8, 2021. Accessed October 5, 2021.
37. Pan L, Sherry B, Njai R, Blanck HM. Food Insecurity Is Associated with Obesity among US Adults in 12 States. *Journal of the Academy of Nutrition and Dietetics*. 2012;112(9), 1403-1409. <https://doi.org/10.1016/j.jand.2012.06.011>
38. Seligman HK, Bindman AB, Vittinghoff E, Kanaya AM, Kushel MB. Food Insecurity is Associated with Diabetes Mellitus: Results from the National Health Examination and Nutrition Examination Survey (NHANES) 1999-2002. *Journal of General Internal Medicine*. 2007;22(7), 1018-1023. <https://doi.org/10.1007/s11606-007-0192-6>
39. Kendall A, Olson CM, Frongillo EA Jr. Relationship of hunger and food insecurity to food availability and consumption. *Journal of the American Dietetic Association*. 1996;96(10), 1019-1024. [https://doi.org/10.1016/S0002-8223\(96\)00271-4](https://doi.org/10.1016/S0002-8223(96)00271-4)
40. Wang X, Ouyang Y, Liu J, Zhu M, Zhao G, Bao W, Hu FB. Fruit and vegetable consumption and mortality from all causes, cardiovascular disease, and cancer: systematic review and dose-response meta-analysis of prospective cohort studies. *BMJ*. 2014;349, g4490. <https://doi.org/10.1136/bmj.g4490>
41. See reference #33.
42. 2020 Report to the California Legislature on the Farmer Equity Act. California Department of Food and Agriculture. <https://www.cdfa.ca.gov/farmerresources/pdfs/2020FarmerEquityReport.pdf>. Published 2020. Accessed October 5, 2021.
43. See reference #42.
44. Analysis of Race/Ethnicity, Age, and CalEnviroScreen 3.0 Scores. California Environmental Protection Agency, Office of Environmental Health Hazard Assessment. <https://oehha.ca.gov/media/downloads/calenviroscreen/document-calenviroscreen/raceageces3analysis.pdf>. Published June 2018. Accessed October 5, 2021.
45. See reference #17.
46. See reference #17.
47. Mckee-Brown A. Op-ed: Transforming School Food Requires More than Universal Access. *Civil Eats*. <https://civileats.com/2021/06/10/op-ed-transforming-school-food-requires-more-than-universal-access/>. Published June 10, 2021. Accessed July 29, 2021.
48. See reference #30.
49. See reference #30.
50. See reference #30.
51. See reference #30.
52. School Nutrition and Meal Cost Study: Summary of Findings. fns.usda.gov. https://fns-prod.azureedge.net/sites/default/files/resource-files/SNMCS_Summary-Findings.pdf. Published April 2019. Accessed July 29, 2021.

53. Flores L, de Blasis T, Shioiri-Clark M, Polonsky H. Nourishing Learners: A Report on School Meals and Education During COVID-19. FoodCorps. <https://foodcorps.org/cms/assets/uploads/2021/09/Nourishing-Learners-FINAL.pdf>. Published 2021. Accessed October 25, 2021.
54. Food Research & Action Center and National Association of Secondary School Principals. School Breakfast After the Bell. frac.org. <https://frac.org/wp-content/uploads/secondary-principals-bic-report.pdf>. Published November 2015. Accessed August 2, 2021.
55. See reference #21.
56. See reference #21.
57. Ray R, Fisher D, Fisher-Maltese C. School Gardens in the City. Du Bois Review: Social Science Research on Race. 2016;13, 379-395. <https://www.cambridge.org/core/journals/du-bois-review-social-science-research-on-race/article/school-gardens-in-the-city/81ADA51B9AD10D47E872090A40C0E979>
58. Miller DL. The Seeds of Learning: Young Children Develop Important Skills Through Their Gardening Activities at a Midwestern Early Education Program. Applied Environmental Education & Communication. 2007;6(1), 49-66. <https://doi.org/10.1080/15330150701318828>
59. See reference #1.
60. See reference #10.
61. See reference #27.
62. Kraus-Polk J, Hamerschlag K. The State of School Lunch in California. Friends of the Earth. <https://foe.org/resources/the-state-of-school-lunch-in-california/>. Published March 2021. Accessed July 29, 2021.
63. Brobronnikov E, Boyle M, Grosz M, Lipton I, Nutter R, Velez M, Yadav L. Farm to School Literature Review. fns.usda.gov. <https://fns-prod.azureedge.net/sites/default/files/resource-files/Farm-to-School-LitReview.pdf>. Published March 2021. Accessed July 30, 2021.
64. Farm to School Counts. Oregon Farm to School. <https://oregonfarmtoschool.org/counts/>. Accessed July 30, 2021.



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