How School Feeding Programs Can Alleviate Hunger & Build a Sustainable Food System

A United States Perspective

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Hunger and Environmental Nutrition
a dietetic practice group of the
Academy of Nutrition and Dietetics

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Overview

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01

Provide

An overview of the U.S. school feeding landscape and it’s primary purpose as a food assistance program.

02

Discuss

Activities in U.S. schools to build sustainable food systems including: waste reduction, farm-to-school programs, and values-based procurement.

03

Identify

Actionable ways nutrition and dietetics professionals can support and get involved in developing sustainable school feeding programs

School Meal Programs in the US Include Breakfast, Lunch, Snacks, and More!

National School Lunch Program (NSLP)

National School Breakfast Program (NSBP)

Fresh Fruit & Vegetable Program

Special Milk Program

Child Adult Care Food Program

Summer Foodservice Program

Media Credit: Canva Stock

(USDA, Food and Nutrition Service, 2023)

The National School Breakfast Program (NSBP) and National School Lunch Program (NSLP) are the primary school feeding programs in the US.


Media Credit: Canva Stock

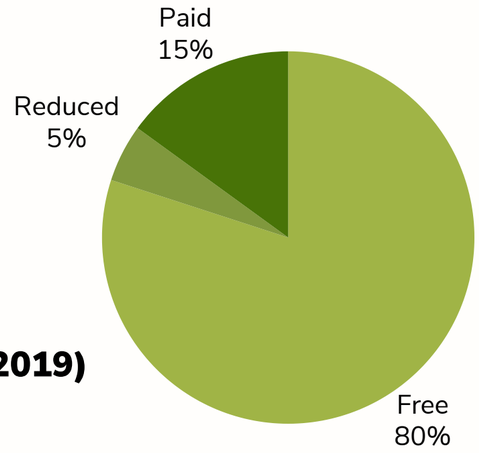
- The majority of schools participate
  - NSBP operates in nearly 90,000 institutions
  - NSLP operates in nearly 100,000 institutions
- Eligible students receive free/reduced-price meals
- Participating schools receive cash subsidies and USDA Foods for each reimbursable meal they serve.

(School Nutrition Association, 2023; U.S. Department of Agriculture, Food and Nutrition Service, 2023; U.S. Department of Agriculture, Economic Research Service, 2023)

School Feeding Programs are key to addressing hunger in the US.

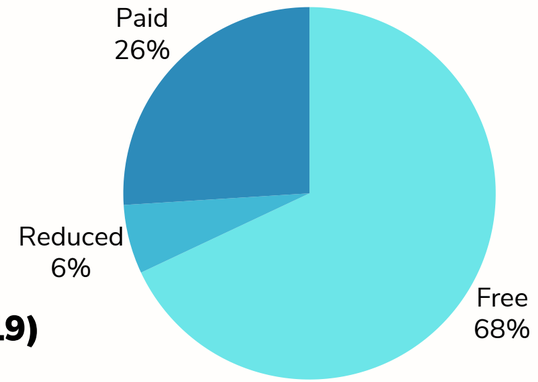
- Today, 1 in 5 kids (13 million children) are living in hunger in the United States.
- School feeding programs are a lifeline for these students.
- The NSLP is the nation's second-largest food and nutrition assistance program behind the Supplemental Nutrition Assistance Program (SNAP). (FRAC, 2023)

The NSBP provides breakfast to **15 million children**/day



% Breakfasts Served at Free/Reduced/Paid Cost (FY 2019)

The NSLP provides breakfast to **30 million children**/day

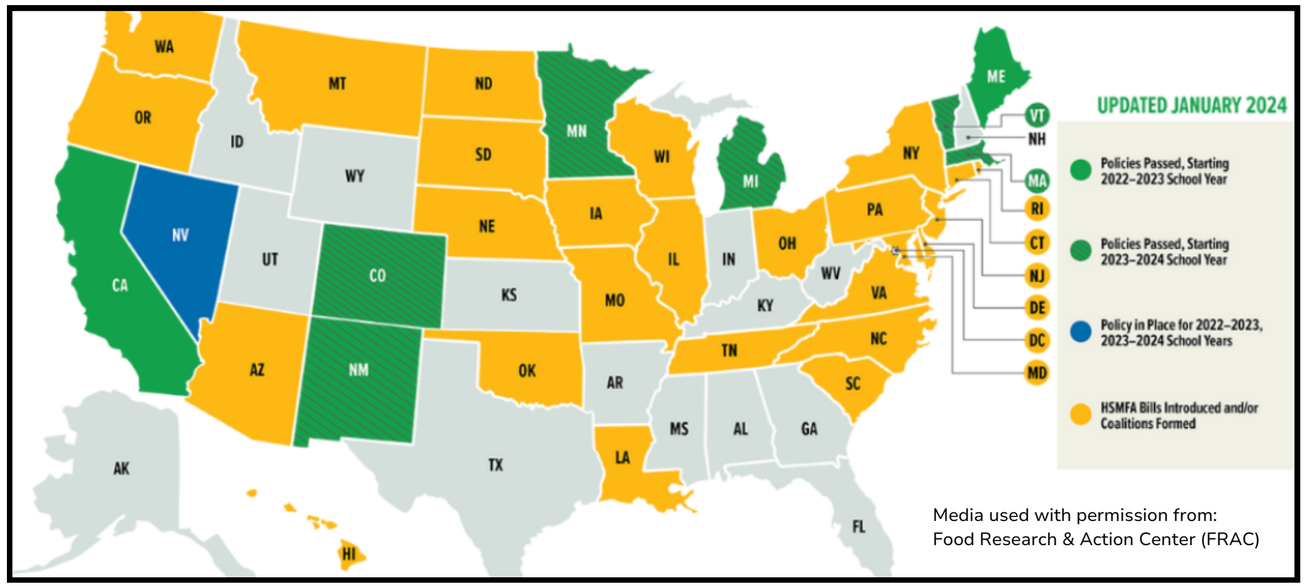


% Lunches Served at Free/Reduced/Paid Cost (FY 2019)

(Rabbitt et al, 2023; School Nutrition Association, 2023; Food Research and Action Center, 2023a)

During the COVID-19 pandemic USDA allowed states to provide free school meals to every child regardless of income

Now several states are finding ways to make these universal free school meals permanent via state funding and policy changes

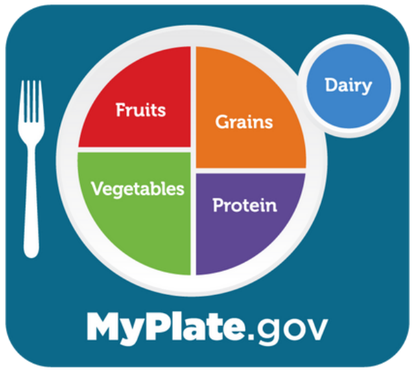


Benefits of Free School Meals for All:

- Ensure all students are hunger-free and ready to learn
- Reduce stigma in the cafeteria
- End school meal debt
- Ease administrative burdens

(Food Research and Action Center, 2023b)

In exchange for cash subsidies and USDA Foods, participating schools must serve meals that meet federal meal pattern guidelines that are based on the Dietary Guidelines for Americans. *(U.S. Department of Agriculture, Food and Nutrition Service. , 2017)*



School lunches are the healthiest meal an average child gets in a day and are more nutritious compared to lunches from other sources, particularly for low-income children. (Vernarelli & O'Brien, 2017; Liu et al., 2021)

Lunch Meal Pattern
Minimum amount of each food component per week (minimum offering per day)

Meal Pattern Components	Grades K-5	Grades 6-8	Grades 9-12
Milk (*unflavored or flavored fat-free or 1% low fat*)	5 (1) cups	5(1) cups	5 (1) cups
FRUIT	2.5 (0.5) cups	2.5 (0.5) cups	5 (1) cups
VEGETABLES Dark Green Red/Orange Beans/Peas (Legumes) Starchy Other Additional vegetable	**3.75 (0.75) cups** 0.5 cup 0.75 cup 0.5 cup 0.5 cup 0.5 cup 1 cup	**3.75 (0.75) cups** 0.5 cup 0.75 cup 0.5 cup 0.5 cup 0.5 cup 1 cup	**5 (1) cups** 0.5 cup 1.25 cups 0.5 cup 0.5 cup 0.75 cup 1.5 cups
GRAINS *(80% whole grain-rich per week)*	8.0-9.0 (1.0) oz eq	8.0-10.0 (1.0) oz eq	10.0-12.0 (2.0) oz eq
MEAT/MEAT ALTERNATES	8-10 (1) oz eq	9-10 (1) oz eq	10-12 (2) oz eq
Nutrient specifications: daily amount based on average 5-day week			
Min-Max Calories (kcal)	550-650	600-700	750-850
Saturated Fat (% of total kcal)	<10%	< 10%	<10%
Sodium Target (mg)	≤ 1110 mg	≤ 1225 mg	≤ 1280 mg

Table adapted from Texas Department of Agriculture, Administators' Reference Manual (ARM), Section 8, Lunch Meals, 2023

The Changing Landscape of School Nutrition Standards in the United States

A brief history

2010

Nutrition standards for school meals updated in response to Healthy Hunger Free Kids Act (HHFKA) for the first time in ~30 years

2012-2014

HHFKA nutrition standards implemented nationwide.

By SY 14-15, 98% of public schools nationwide were meeting them.

2017-2019

In response to industry pressure and schools requesting more flexibility, legislation weakened nutrition standards for sodium, whole grains, and milk.

2020

In response to the COVID-19 pandemic USDA authorized waivers allowing flexibility with nutrition standards due to ongoing supply chain, staffing, and logistical challenges.

2022

COVID-19 waivers ended. Transitional standards went into effect for fall 2022 which promote a healthy diet, but still offer flexibilities given ongoing challenges.

2023

USDA released a proposed rule* to revise meal patterns to be more consistent with 2020-2025 DGAs, with a focus on added sugars, milk, and sodium.

(Miller, 2022)

*“Child Nutrition Programs: Revisions to Meal Patterns Consistent With the 2020 Dietary Guidelines for Americans”

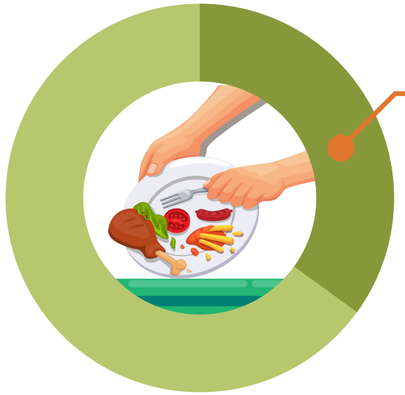
Schools in the United States are going beyond simply feeding hungry students; they are strategically leveraging feeding programs as catalysts for broader systems change.

01 *Waste Reduction*

02 *Farm-to-School Programs*

03 *Values Based Purchasing*

(Spiker et al, 2020a; Tagtow el al, 2014)



8% from institutional foodservice settings

30-40%

of the US food supply goes to waste annually (Gunders & Bloom, 2017)

1/3

of greenhouse gas emissions come from the food system. (Gunders & Bloom, 2017)

Waste Reduction Strategies in Schools:

Reduce

- **Ordering, prepping, storage**
- **Menu planning**

Recover

- **Share tables**
- **Food donations**

Recycle

- **Recycle disposables**
- **Compost food scraps**

(Folliard et al., 2021)

What is Farm to School?

Farm-to-school implementation differs by location but always includes one or more of the following:

Education

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

School gardens

Students engage in hands-on learning through gardening

Procurement

Local foods are purchased, promoted, and served in the cafeteria or as a snack or taste test*

**There is no generally accepted definition of "local" food.*

(National Farm to School Network, n.d.)

Key Term:

School Food Authority (SFA)
The entity responsible for school food service operations. SFAs can be school districts, individual schools, or other entities.

According to the 2019 Farm to School Census, the majority of schools are participating in farm-to-school.

65.4%

of School Food Authorities (SFAs) reported participating in one or more farm-to-school activities in SY 2018 – 2019, **57%** of which had done so for **< 3 years.**

76.8%

of SFAs are **serving local food** in their child nutrition programs, totaling **$1.26B** in national spend.

59.9%

of SFAs report providing a variety of food, nutrition, or agriculture **education,** including taste tests, field trips to farms, and farmer visits.

30.4%

of SFAs have **edible gardens**

(U.S. Department of Agriculture, Farm to School Census, 2021); Media Credit: Canva Stock

No Garden? No Problem!

Photos credit: Marissa Bell

Why Farm to School?

Kids Win!

- Provides all kids access to high-quality, nutritious, local food.
- Enhances education through hands-on learning opportunities.
- Empowers students to be conscious eaters and stewards of the environment.

Farmers Win!

- Opens up institutional market channels for local producers and suppliers. = huge financial opportunity!

Communities Win!

- Builds parent and community engagement.
- Creates new jobs and strengthens the local economy.

(National Farm to School Network, The Benefits of Farm to School, 2020)
Media credit: Canva Stock

Stay Up to Date:

National Farm to School Network

Patrick Leahy Farm to School Program

Big Spend, Big Impact!
The Power of Procurement

Large public institutions like schools, hospitals, and prisons supply about $120 billion worth of food each year, often serving some of the nation's most vulnerable populations.

This represents a **significant opportunity** to promote dietary patterns that *enhance human, animal, and planetary health while supporting equity and social responsibility.*

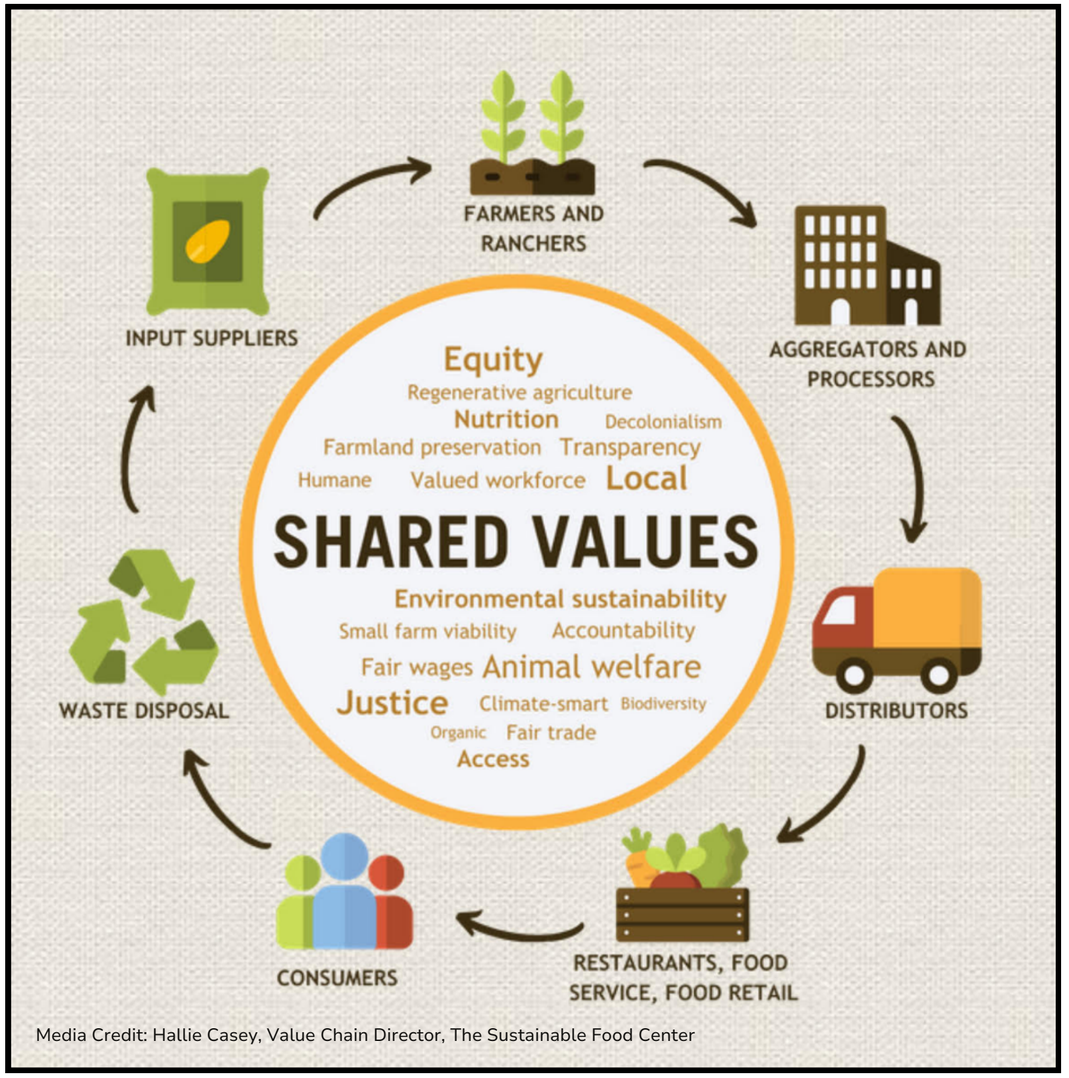
(Union of Concerned Scientists, 2018)

Supply Chain

“The term “supply chain” describes the processes that get food from farms onto tables. They can include many different “supply chain actors.” To name a few: *farmers, packers, processors, shippers, and grocers.”*

Value Chain

The USDA defines value chains as “strategic alliances between farms or ranches and other supply-chain partners that deal in significant volumes of high-quality, differentiated food products and distribute rewards equitably across the chain.”



Media Credit: Hallie Casey, Value Chain Director, The Sustainable Food Center

(Diamond et al., 2014; Casey & Ramirez, 2023)

Media Credit: Canva Stock

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Values-Based Procurement (VBP):

A strategic approach to purchasing that prioritizes ethical, social, and environmental considerations alongside cost and quality.

The Good Food Purchasing Program (GFPP) is one framework by which to measure progress in value-based purchasing.

6 core values:

LEAVEN

LOCAL ECONOMIES

EQUITY + TRANSPARENCY

ANIMAL WELFARE

VALUED WORKFORCE

ENVIRON. SUSTAINABILITY

NUTRITION + COMMUNITY HEALTH

(Center for Good Food Purchasing, n.d.b), Media Credit: Canva Stock

IMPACT CALCULATOR

ENVIRON. SUSTAINABILITY

“By replacing some meat purchases with plant proteins—and focusing on regenerative ranching for remaining meat products—institutions can significantly lower their carbon and water footprint.”

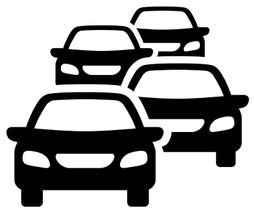
Scenario:

Region’s population: <250,000

Annual institutional food spend: $12 M

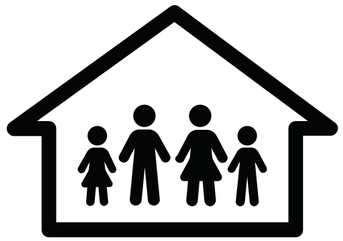
If you replaced 20% of beef with plant-based proteins (e.g., beans, pulses, and tofu)

- 2,831,667lb of CO_2 equivalent emissions



= 377 cars off the road annually

- 13M gallons of water



= annual water needs of 266 households

Replacing conventionally-produced animal products with plant proteins could also:

- Reduce the amount of farm animals raised without humane living conditions.
- Reduce the harmful effects of concentrated animal feeding operations that disproportionately impact rural communities and communities of color.
- Reduce the public health burden of living near industrial animal production facilities.

(Center for Good Food Purchasing, n.d.a), Media Credit: Canva Stock

Many factors influence institutional purchasing decisions

(Slonim, A.,2022); Media Credit: Canva Stock

3 main purchasing thresholds determine how a SFA can source food:

1. Micro-purchase threshold (requires no competition)
    - Ex: in Texas, ≤ $10,000.00
2. Small purchase threshold (requires informal competition)
    - Ex: in Texas, ≤ $49,999.99.
3. Formal purchase threshold (requires formal competition)
    - Ex: in Texas, $50,000.00+

SFAs must follow the federal thresholds or any lower thresholds imposed at the state or local level

(Slonim, A.,2022), Media Credit: Canva Stock

(Slonim, A.,2022),
Media used with permission from: The Common Market Texas

Competitive Bid Award Process

(Slonim, A.,2022)

Cooperative Purchasing

For smaller institutions,

Cooperative purchasing gives peace of mind around purchasing power and compliance. This often outweighs the flexibility of going out to bid independently.

Media Credit: Canva Stock

Purchasing Power

Together, smaller organizations can collectively meet product minimums for an item to be considered on the bid and can achieve cost savings through economies of scale.

Collective purchasing requires collective demand

Co-op members must agree on priorities for specific products to be considered for the bid (ex: organic produce)

Barrier

Stringent purchasing regulations

Media Credit: Canva Stock

Solution

- Lean on micro-purchases (< $10,000)
- Work with cohort of regional buyers to obtain values-aligned products via formal bid process

Media Credit: Sustainable Food Center

Going Further

More regional demand would make VB products easier to obtain via formal bid procedures. Schools could spend more on these items & menu more often.

Media Credit: Sustainable Food Center

Barrier

Limited budget/high cost of VB products

Media Credit: Canva Stock

Solution

- Menu less frequently
- Featured product promotions
- Cross-utilize funds for farm-to-school education
- Use entitlement funds

Media Credit: Lake Travis ISD

Going Further

Policy changes to allow schools to invest in their local economies through VBP would make this work a lot more feasible (ex: Universal Meals, self-certification of micro-purchase thresholds)

Media Credit: Canva Stock

Barrier

Distribution/ Limited vendor delivery capacity

Media Credit:Canva Stock

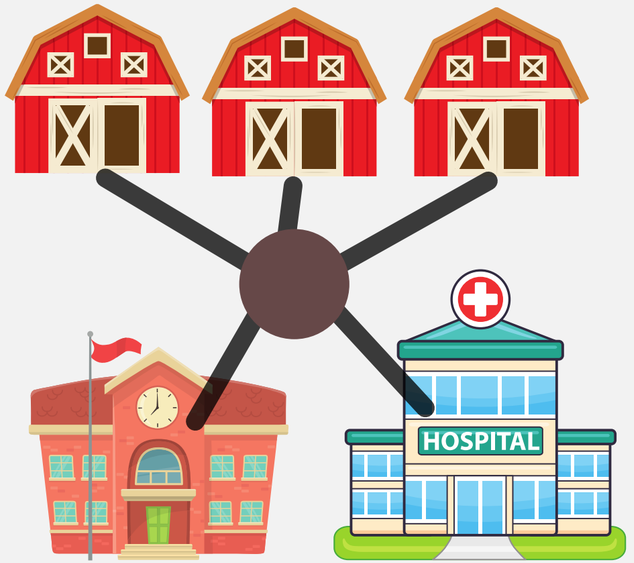
Solution

- Work with distributors that can deliver to more than 1 drop site
- Distribute product ourselves as able

Media Credit: Marissa Bell

Going Further

If there was a food hub in Austin that could aggregate, deliver to multiple drop sites, and streamline vendor paperwork, we could serve more often.



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Cultivating Sustainable, Resilient, and Healthy Food and Water Systems: A Nutrition-Focused Framework for Action

(M. Spiker et al, 2020b)

Training/ Education

Practice

Entry Points

That leverage strengths of nutrition & dietetic professionals throughout the food system

1) Shape & Deliver Dietary Guidance
2) Improve Food, Nutrition, & Water Security
3) Align Food Production & Nutrition
4) Optimize Supply Chains & Food Environments
5) Reduce Waste

Research

Policy

Media credit: Canva stock, graphic adapted from M. Spiker et al., 2020b

Small Action, Big Impact:

Be a part of the celebration and contribute to building momentum for sustainable food systems and the farm-to-school initiative!

October 2024

NATIONAL FARM to SCHOOL MONTH

Media Credit: Toolkit from National Farm to School Network

March 2024

BEYOND THE TABLE

2024 NATIONAL NUTRITION MONTH®

A CAMPAIGN BY

THE ACADEMY OF NUTRITION AND DIETETICS

Media Credit: The Academy of Nutrition and Dietetics

Resources

USDA Patrick Leahy Farm to School Program
Get information on farm-to-school grants, research, technical assistance, and training

USDA Team Nutrition
Find training and technical assistance materials for child nutrition programs to support child education, healthy eating, and physical activity.

USDA Farm to School Census
Learn about farm-to-school programs nationwide and see how your school district measures up.

National Farm to School Network
Comprehensive farm-to-school resource database with toolkits, policy, curricula, and more!

Action for Healthy Kids - Farm to School
Provides tips for taking action on farm-to-school and resources for implementation

Whole Kids Foundation - School Gardens Resource Center
A comprehensive guide to building a new school garden or supporting an existing one, with creative ideas and additional resources

Green Schools National Network
Find resources, coaching, and partnering opportunities that can help transform your curriculum, culture, and campus into a Green School.

Johns Hopkins Food Policy Networks - Resource Database
Resource database for food policy councils or others looking to establish farm-to-school policies at local and state levels.

The Good Food Purchasing Program - Impact Hub
Explore the impact of values-based procurement with interactive calculators and real-world examples

The Good Food Purchasing Program - Program Overview
A program overview, including vision, strategies, criteria, and certifications for each value category

Anchors in Action Framework
A common set of criteria, definitions, certifications and attributes, measures, and strategies to support values-based procurement efforts across institutional sectors.

Advancing School Food Procurement: Driving Values-Based Purchasing Through Competitive Solicitations
A resource to inspire all schools interested in shifting toward or advancing their values-based procurement and sourcing practices by providing case study examples, tangible tips, and example solicitation language,

Procuring Food Justice: Grassroots Solutions for Reclaiming Public Supply Chains
A report that distills lessons from a decade of organizing to offer advocates a new blueprint for leveraging a “values-based purchasing” strategy

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QUESTIONS?

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