

Growing Opportunity for Farm to School

How to Revolutionize School Food, Support Local Farms, and Improve the Health of Students in New York

BY SAMANTHA LEVY AND KALI McPETERS







AMERICAN FARMLAND TRUST

American Farmland Trust, or AFT, is the largest national organization dedicated to saving the land that sustains us by protecting farmland, promoting sound farming practices, and keeping farmers on the land.

AFT launched the conservation farming movement and continues to raise public awareness through the No Farms No Food® message. Since our founding in 1980, AFT has helped permanently protect over 6.5 million acres of farmland, advanced environmentally-sound farming practices on millions of additional acres, and supported thousands of farm families.

By combining on-the-ground projects with objective research and effective advocacy, AFT is the only national agricultural organization that approaches its work in such a comprehensive, holistic manner. AFT works to advance better agricultural policy within all tiers of government and continues to conduct groundbreaking research that changes America's view of farming.

AFT has a national office in Washington, D.C., and a network of field offices across the United States where farmland is under threat. The New York office was established in 1990, as the state is home to some of the most threatened farmland in the nation. This growing office coordinates programs, conducts research, and engages in advocacy to keep farmers on the land, keep land in farming, and help farmers adopt sound farming practices.

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Farm to Institution New York State, or FINYS, is a collaborative initiative led by American Farmland Trust to dramatically expand the volume of food grown on New York farms that is served in institutions across New York like schools, universities, hospitals, and others. FINYS strengthens the economic security of farmers and the health of New Yorkers by empowering institutions to spend at least 25% of their food budget on fresh and minimally processed food grown in New York. Past FINYS research has revealed over \$200 million of potential economic impact, and the opportunity to positively influence the health of over 6.6 million of our most vulnerable New Yorkers if public institutions were to meet this goal.

FINYS advances public policy campaigns, educates institutions about buying locally, and inspires commitment from institutions to expand local food purchasing. AFT staff also lead the New York Grown Food for New York Kids Coalition, a project of FINYS, advocating for state-level programs and policies that will help schools purchase and serve more New York grown food to K-12 students.

Learn more, get engaged, and find other tools and resources at www.finys.org.



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WITHIN FIVE YEARS...



72% of schools

anticipate reaching 30% spending on **NEW YORK-GROWN FOOD** for lunch. with the right support.















\$150 million

would be spent by schools at **NEW YORK FARMS**



increasing access to **HEALTHY, LOCAL FOOD** to almost

700,000

K-12 STUDENTS across New York.



This would generate over

IN ECONOMIC IMPACT STATEWIDE



by 2024.



Executive Summary



n 2018, the state of New York, led by Governor Andrew Cuomo's No Student Goes Hungry Initiative, created a major new incentive to encourage schools to buy more food from New York farms. This incentive enabled schools that spend at least 30% of their lunch food budget on food from New York farmers, growers, producers, or processors to receive 25 cents per meal in state reimbursement—quadruple the 6 cents reimbursement they had received for the past 40 years.

After the first year of this incentive, AFT surveyed over 300 school food authorities, or SFAs, at K-12 schools across the state to learn whether this program successfully stimulated more purchasing of New York grown and raised food. While



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many schools saw 30% as a challenge, 49 SFAs applied to the New York State Education Department for the extra reimbursement claiming they reached 30% within just one year. This includes Buffalo Public Schools, the second largest district in the state, which spent over \$2.6 million on food from New York farms during the 2018–19 school year.

AFT's research found that 72% of schools felt optimistic that with the right support they would achieve 30% within five years. Achieving this outcome would cause schools to spend nearly \$150 million at New York farms over the next five years while increasing access to healthy, New York grown food for almost 700,000 K–12 students by 2024. Conservatively, this would generate over \$210 million in economic impact statewide while costing the state just over \$94 million over the course of five years in reimbursement and support.

However, schools still face barriers when attempting to buy more New York grown food and reach 30%, and more must be done to help them in order to unlock the incredible economic and public health potential of this program. Food service directors reported not having enough staff time to dedicate to Farm to School, and difficulty navigating procurement regulations that favor "least cost" options as their main barriers to buying more local food. Regarding participating in the incentive program specifically, many schools reported that 30% was too high of a threshold, and that there was a lack of clarity around program guidelines and requirements. When asked what would help them increase their purchasing of New York grown food, food service directors reported that getting their main vendor, which is often a distributor, to provide more New York food products would be most helpful in getting them to increase the amount of New York food products they purchase in order to reach 30%.

RECOMMENDATIONS

Based on the research conducted for *Growing Opportunity for Farm to School*, recommendations for achieving the significant potential of Farm to School to support New York farms and improve the health of students across the state over the next five years include:



Continuing to fund the New York Farm to School Purchasing Incentive and increasing funding for the Farm to School Grants Program in the New York State Budget;



Investing in regional and statewide farm to school coordinators to provide critical support to food service directors to increase their purchases of New York grown and raised food;



Creating consistent, stable, and clear written guidelines on how to qualify for and verify achievement of the 30% threshold so schools know what is required in order to receive the extra reimbursement;



Incorporating accountability mechanisms into the program for intermediaries that bring food from farms to schools to ensure the accuracy of the geographic origin information they provide, while ensuring the process of verification is clear, efficient, and based on supply chain realities;



Providing trainings for school administrators, food service directors, and key staff to better understand the incentive program, how to procure New York grown and raised food, and strategies to replicate the success of schools that have achieved 30%;



Passing state and federal legislation to make it easier for food service directors to spend money on food from local farms through both formal and informal procurement methods;



Investing in the supply chain and equipment to build processing capacity and scratch cooking at schools; and



Expanding the Farm to School Purchasing Incentive to all meals for schools that spend 30% of their total budget on New York food products to remove barriers to participation, increase economic impact, and improve access to local food for students.

Farm to School

A Win-Win for Farmers and Kids



ew York has long been a national leader in the production of food and other agricultural goods, and farmers play a major role in the state's economy with over 33,000 farm businesses generating nearly \$45 billion in economic activity while supporting 160,000 jobs. Farms act as anchor businesses in rural communities—providing food, jobs, and places to gather. Stewarding nearly a quarter

of New York's land area, farms keep residents in the countryside while maintaining a lively local economy of support services.

Despite their importance, since 1980 New York has paved over the equivalent of 5,000 farms.³

Currently, a combination of trade challenges, falling commodity prices, high costs of doing business, development pressures, an aging farmer population, and increased extreme weather due to climate change threaten the future of agriculture in New York. Actions must be taken to support our farmers and the land they steward to ensure a



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strong future for farming in the state. Farm to School programs are one such strategy, providing new market opportunities for farmers to enhance the economic, social, and environmental sustainability of their farms while strengthening rural communities and improving the health and academic outcomes of our children.

Farm to School programs promote the use of fresh, locally sourced food in school meals. This presents robust new market opportunities for farmers, helping them diversify to manage risk while creating new jobs and growing the local economy.⁴ Recent studies show that each dollar invested in Farm to School stimulates an additional \$0.60–\$2.16 in local economic activity.⁵ A 2016 study published by Cornell University revealed that if New York schools were to buy just one additional New York grown fruit or vegetable per week, this could increase revenue for vegetable farmers by \$9.2 million, or for fruit growers by \$5.3 million.⁶ Farm to School

purchasing also creates new markets for products such as small apples and pears, potentially reducing food waste for fresh fruit and vegetables that wouldn't otherwise have a market. Studies also show that Farm to School programs create jobs—according to Anne Hazlett, former assistant secretary for rural development at the U.S. Department of Agriculture, or USDA, for every job that is created in Farm to School programs, another 1.67 jobs are created in the local community.7

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The USDA and numerous studies have also recognized the potential that Farm to School

programs have in creating positive health outcomes for students. ⁸⁻¹⁰ According to the New York State Department of Health, nearly one in five kids and teens under the age of 18 in New York are obese and one in three are overweight or obese—record highs. ¹¹ Increasing consumption of fresh fruits and vegetables and other healthy foods is a known strategy for improving health outcomes, which could address these and other serious health threats facing our children such as increased rates of diabetes and hypertension. ¹² Reportedly, up to one-half of a child's daily nutrition comes from school meals, and therefore the meals served to nearly 1.7 million children in New York's K–12 schools present an important opportunity to improve their overall well-being while teaching them lessons about healthy eating that can last a lifetime. ¹³ Furthermore, almost 1 million schoolchildren across New York state do not have consistent access to the food they need to live an active, healthy life. ¹⁴ Expanding access to healthy food in school cafeterias can improve the health of low-income schoolchildren for whom school meals are often the only dependable source of daily calories.

Studies have also shown that increasing access to healthy, fresh food, which can be accomplished through Farm to School programs, can have positive impacts on educational outcomes. One study out of the University of California, Berkeley revealed that students at schools that contract with a healthy school lunch vendor score higher on statewide achievement tests, as nutrition can affect learning through three channels: physical development, cognition, and behavior. Farm to School meals and activities can also educate children about agriculture and the importance of a good diet to a healthy lifestyle, teaching life-long healthy eating habits and a better understanding of where their food comes from at a critical time in their development.

Farm to School Programs in New York State

A History Lesson



n 2001, the State of New York created its Farm to School Program under the joint jurisdiction of the New York State Education Department, or NYSED, and the New York State Department of Agriculture and Markets, or NYSDAM, to grow the farm economy, positively impact the health of children, and increase access to healthy, locally grown food for students across the state. This action created a number of support services for schools seeking to buy food from New York farms and engage students in Farm to School activities.¹⁷

According to the USDA Farm to School Census, by 2015 nearly 300 New York school districts reported Farm to School activities, spending an average of 11% of their overall food budgets on New York grown and raised food for a total of \$45.3 million in spending at New York farms.¹⁸ That same year, Governor Andrew Cuomo launched the Farm to School Grants program to further grow Farm to School in New York state by investing in kitchen equipment upgrades, training for staff on how to handle fresh food, and the hiring of Farm to School coordinators to help connect schools with farms. Since the start of this program, nearly \$3.5 million has been invested to support 43 Farm to School projects benefitting 255 school districts across the state.19

Even with this admirable growth, a 2016 study conducted by NYSED revealed that food service directors still reported facing barriers to purchasing New York grown food, citing cost



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Since 2017, the New York Grown Food for New York Kids Coalition has advocated for state policies that reduce barriers in Farm to School programs.

as the main barrier.²⁰ Seeing the important opportunity Farm to School presents to our farmers and our children, AFT and FINYS formed the New York Grown Food for New York Kids coalition in 2017 to advocate for new state policies and programs to remove remaining barriers schools face in making Farm to School purchases, with the goal of changing the culture in cafeterias statewide to one that supports local farmers,

New York Food Product, as defined by NYSED, encompasses food items that are grown, harvested, or produced in New York State (NYS); or a food item processed inside or outside NYS comprising over 51% agricultural raw materials grown, harvested, or produced in NYS, by weight or volume.

A School Food Authority (SFA)

is the governing body responsible for the administration of meal programs at schools. SFAs have the legal authority to operate a nonprofit school food service therein, or otherwise approved by the Food and Nutrition Service of the U.S. Department of Agriculture to operate the National School Lunch Program. SFAs may serve one school district, several school districts, or individual schools and are managed by a food service director. Additionally, one food service director can oversee multiple SFAs.

feeds children healthy local food, builds stronger communities, and teaches kids lessons about eating and agriculture that will last a lifetime. This coalition brought together diverse organizations and individuals from the school, farm, food, public health, environmental, economic development, and anti-hunger sectors who advocated as one in 2017 for a financial incentive to lower the cost barrier and help schools purchase more New York grown fresh and minimally processed food.

In response, in 2018 Governor Cuomo took on a national leadership role in the emerging Farm to School movement by announcing the No Student Goes Hungry Initiative. With support from the State Legislature, the state of New York doubled funding for the Farm to School Grants program to a record \$1.5 million and created the nation-leading New York Farm to School Purchasing Incentive to quadruple schools' per meal reimbursement if they spend 30% of their lunch food budget on New York food products.¹ This provided unprecedented support and opportunity for the growth of Farm to School in New York state.²¹

This newly created incentive is the most generous in the nation to grow Farm to School purchasing. By quadrupling the state's per-lunch-meal

reimbursement from 6 to 25 cents for schools that spend 30% of lunch food costs on food from farmers, growers, producers, and processors in New York state, it addresses the greatest barrier schools face in supporting local farmers: cost. Coupling this program with an increase in funding for Farm to School grants provided a framework for success to help grow the amount schools can purchase and serve from New York farms. Guidelines for the initiative were released halfway through the 2018–19 school year, providing basic information on which 'New York food products' were eligible to be included in the accounting to get to 30% and how reporting would take place.

Within one year of the program, 49 School Food Authorities, or SFAs, out of 927 claimed they've reached 30% within year one of the program. Encouragingly, this includes Buffalo Public Schools, the second largest school district in the state which serves 29,000 students daily and spent over \$2.6 million on New York food products during the 2018–19 school year.

 $i \quad Where \ referenced \ in the \ report \ New \ York \ State \ Food \ Products \ or \ New \ York \ food \ products \ refers \ to \ the \ definition \ in the \ New \ York \ State \ Education \ Department's guidelines for the \ NYS \ Farm \ to \ School \ Reimbursement \ incentive. \ http://www.cn.nysed.gov/content/additional-state-subsidy-purchasing-new-york-state-food-products$

ii Provided that processed products are comprised of at least 51% ingredients by weight or volume from farms in New York.

iii NYSED is conducting audits throughout the 2019/20 school year to verify these schools met 30%. Updated information can be found at: http://eservices.nysed.gov/sedreports/list?id=2

Putting Pencil to Paper

Evaluating Effectiveness of the New York Farm to School Purchasing Incentive



iven the trailblazing nature of this initiative, AFT and FINYS undertook research after the first year of the New York Farm to School Purchasing Incentive program to determine its effect on Farm to School purchases and to ensure it is on the right track to positively impact student health and the state's farm economy. At the end of the 2018-19 school year, a survey was sent to a random sample of 303 food service directors responsible for purchasing food at School Food Authorities statewide, which yielded 179 responses. AFT staff then conducted 15 follow-up interviews with food service directors and distributors to complement and illuminate the data collected in the survey. The New York City Department of Education—which as the second largest institutional buyer of food in the country behind the Department of Defense spends \$240 million on food annually to feed 1.1 million students—completed a survey and interview to inform the state of New York how to help all schools purchase more New York grown and raised food and meet 30%.

About the survey: Responses to the survey were voluntary, and selection bias may be present as 40% of the sample did not complete the survey. Additionally, not all respondents answered every question, therefore, the number of responses to each question are labeled throughout the report. Despite these limitations, the survey yielded a 59% survey response rate, a well-recognized threshold for reliable research results. The combination of choosing a randomized representative sample, and this high response rate makes it appropriate to consider the results generalizable, to a reasonable degree, to all New York state schools.^{iv}



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Food Service Directors are

responsible for directing the expenditure of the food service budget and for planning school menus, ensuring food quality, and following nutrition standards. One food service director is appointed to each School Food Authority (SFA), which is the administering unit for the operation of a school meal program.

iv More information on methods and limitations can be found in the appendix.

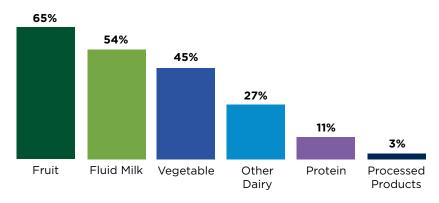


The Potential to Revolutionize School Food Statewide



that the New York Farm to School Purchasing Incentive presents an incredible opportunity to transform the food our students have access to at school while opening up new markets for New York farmers. During the 2018–19 school year alone, food service directors reported purchasing more New York fruit, fluid milk, vegetables, dairy products like cheese and yogurt, and protein when compared to previous years

FIGURE 1. NEW YORK FOOD PRODUCTS SCHOOLS PURCHASED MORE OF BY VALUE DURING 2018-2019 SCHOOL YEAR

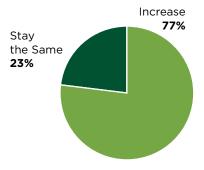


(figure 1, Responses=98). The availability of New York food products at lunch also reportedly increased student participation in school lunch, with one food service director from Hamburg Central School District noting that on "New York Thursdays," when they featured New York grown and raised food, they "served 50+ more meals than our regular Average Daily Participation."

FIGURE 2. MOST SCHOOL FOOD SERVICE DIRECTORS EXPECT TO INCREASE NEW YORK GROWN FOOD PURCHASES IN THE FUTURE



When asked whether they expect their future purchases of New York grown and raised foods to increase, decrease, or stay the same, 77% of food service directors reported that in the future their purchases of New York foods would increase. Encouragingly, *zero* food service directors reported that their purchasing would decrease (figure 2, responses=113).



The Option "Decrease" was not selected by any respondents

Food service directors expressed a desire to buy a wide variety of products from New York farms in the coming years including: everything—if affordable (64%), apples (24%), milk (19%), other dairy products, bread, eggs, leafy greens, chicken, beef, tomatoes, and carrots. This data reveals that schools will provide support for many different types of farms in the future.

For a long time we were only successful with the heroes and the champions...that really feel strongly about Farm to School. But since the initiative it definitely feels like a different conversation now. Having the incentive in place has already caused a lot of change in behavior.

-SILAS CONROY

Director of Supply Chain, Headwater Food Hub

When Schools Will Reach 30%

This research also revealed that we can expect modest but quick growth in the number of schools that buy enough New York grown food to meet the 30% threshold in year two of the program. The number of survey respondents that expected to achieve 30% in year two doubled compared to year one (figure 3, n=113).

Food service directors were also asked to estimate when in the future they expect to increase local

purchasing enough to reach 30%. According to their responses, the number of School Food Authorities that reach the 30% threshold will grow steadily over time, with 72% expecting to meet the threshold within the next five years *if given the right support* (figure 4, n=76). The New York City Department of Education Office of Food and Nutrition Services, also projected they would be successful within this time frame, estimating it might only take three to five years to achieve 30%.

If 72% of School Food Authorities reached 30% by 2024, this would increase access to healthy, fresh, local food for almost 700,000 school children, increasing the amount schools spend on New York grown food to nearly \$150 million. This has the potential to generate over \$210 million^v in total economic impact statewide while only costing the state of New York just over \$94 million throughout the course of the next 5 years in reimbursement and support. And this is a conservative estimate of benefits—if New York City were to reach 30%, the impact would be exponentially greater.

From this data, it is clear that there is great potential and reason for optimism that this program will achieve great success. However, these outcomes will only be achieved if schools receive the right support now to build on the momentum that has been created.



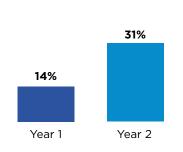
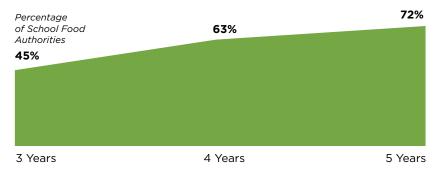


FIGURE 4. EXPECTED TIME SCHOOL FOOD AUTHORITIES NEED TO REACH 30%



v The multiplier used (1.43) is NYS specific and generated by Cornell using models originally developed to estimate the contribution of agriculture to the New York economy in 2014.

vi More information on calculations of costs and benefits can be found in the methods section in the appendix.

Challenges Schools Face in Buying New York Grown Food

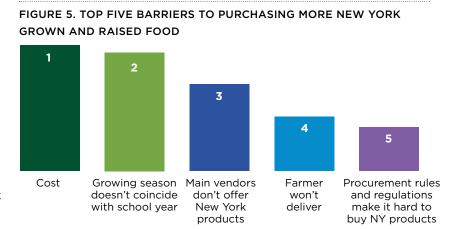


his paints a promising picture for the future of Farm to School in New York; however, food service directors still reported facing real barriers when trying to buy more New York grown food generally, and when trying to qualify for and participate in the incentive program specifically. Addressing these barriers will be critical both to increasing the ability of schools to support New York farms and increase access to local food for students.

Barriers to Purchasing New York Grown and Raised Food

Survey data revealed five main challenges food service directors reported facing in buying more New York grown and raised food generally: (figure 5, n=105)

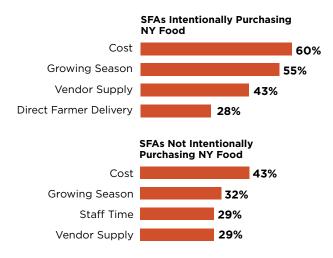
- 1. Cost
- 2. New York's peak growing season doesn't coincide with the school year
- 3. Schools' main vendors do not offer enough New York food products
- 4. Farmers won't deliver to their school
- 5. Challenges navigating procurement regulations that favor "least cost" options



Working out delivery logistics with farmers or navigating the procurement process so that main vendors offer more New York products takes time, skills, and expertise that must be developed in school food service directors or provided by outside support staff. And even with such support, procurement rules will need to be updated so that schools can more easily spend food dollars at local farms.

For those food service directors who reported that they do not currently purchase New York food products, "lack of staff time" jumped to number three on the list of barriers as compared to those that already buy New York grown food (figure 6). As one food service director put it, "I am a one-person show. I am also the secretary. I wear many hats." Food service directors plan, purchase, manage, and at times cook and serve meals to children

FIGURE 6. COMPARING BARRIERS TO PURCHASING NEW YORK GROWN AND RAISED FOOD



Following Regulations to Procure Local Food

When buying food, schools must use informal or formal processes as dictated by federal, state, and local regulations to protect competition and responsible use of taxpayer dollars. In New York, schools must go through the formal bidding process when making purchases over the Small Purchase Threshold. In formal bidding, schools prepare a time-intensive, sealed invitation for bids generally long before the school year begins, which is awarded to the least-cost, most responsive bidder. Currently, one of the only legal tools available to 'buy local' through the formal bidding process is a geographic preference bid, which gives extra points to a vendor that can supply local food, but schools must still award the contract to the least-cost vendor. Informal bids such as small or micro-purchases are more flexible. For purchases between the Small and Micro-purchase threshold, schools can make a small purchase whereby they are required to get three guotes, and must choose the least-cost, most responsive bidder. For purchases under the micro-purchase threshold schools can make direct micro-purchases from farmers on a one-off basis without soliciting multiple bids. For up to date information on small and micro purchase thresholds in New York, please visit www.cn.nysed.gov/farmtoschool.

all while following procurement and nutritional guidelines set at various levels of government. To enable many more of them to engage in Farm to School, outside support will be necessary.

The New York City Department of Education Office of Food and Nutrition Services reported facing a slightly different set of challenges when working to increase local purchasing. While many School Food Authorities can work within current procurement guidelines by spending smaller dollar amounts to make informal small and micro-purchases directly from farms, New York City must rely on aggregators, manufacturers, and distributors to supply them with enough food for 1.1 million students each day. In other words, New York City schools must rely entirely on formal bids, which have stricter rules and restrictions, when trying to purchase local food. New York City also faces additional city-level procurement regulations that limit their ability to develop the marketplace for their needs. Due to this, the top barriers they reported to buying more New York grown food were: 1. Cost, 2. Limited capacity of the market to meet demand, 3. Lack of staff time, 4. Lack of trained staff, and 5. A growing season that doesn't coincide with the school year. In other words, their main limiting factors included a lack of supply in the marketplace in addition to cost and too little staff time to dedicate to Farm to School activities. vii

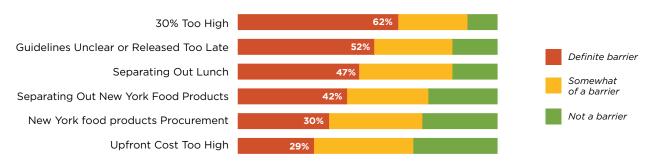
Challenges to Achieving New York's Farm to School Purchasing Incentive

The Farm to School Purchasing Incentive was created to lower the barriers schools face in buying more New York grown and raised food. Therefore, food service directors were also asked to determine whether this incentive was effectively enabling them to purchase more local food and to identify any barriers to participating in the program as currently structured. The three main challenges they cited related to the incentive program were that (figure 7, n=86):

- 1. Thirty percent is too high;
- 2. The guidelines were released too late in the year/are unclear; and
- 3. It is hard to separate lunch from overall food purchases.

vii $\,$ For more information, please refer to New York City case study on page 22.

FIGURE 7. BARRIERS TO PARTICIPATING IN THE 30% NYS INITIATIVE



FARM TO SCHOOL PURCHASING INCENTIVE: LOWERING THE COST BARRIER

At first glance, this list reveals something significant—when asked about barriers to participating in the New York Farm to School Purchasing Incentive, up-front cost fell to number six with only 29% of respondents defining it as a "definite barrier." Interviews supplied further evidence that this program is addressing the cost barrier effectively, with Joe Kilmer, the food service director from the Greater Southern Tier BOCES reporting: "Prior to the incentive I would have said cost was my largest barrier, but with this new 19 cents I am not as cost sensitive as I was before."

PROGRAM GUIDELINES

The number two barrier to participating in this program in its pilot year was that the guidelines were released too late in the year, or were unclear. After the state budget passed in April, guidelines on how to qualify for the incentive were released in December. By then, schools had already planned menus and put out bids for many of the items they were buying that year; therefore, most food service directors couldn't easily incorporate changes to their menu or purchasing to increase procurement of New York food to meet program guidelines in year one. Even with this limitation, 49 SFAs applied for the reimbursement in year one, revealing the determination, and dedication of committed Farm to School champions across New York State.

But as implementation of this program in its pilot year has continued, schools have struggled to understand how to prove they reached the 30% threshold. Looking ahead, state agencies must develop and provide clear and consistent guidelines around reporting so that schools can plan for success. This will enable schools to take the risk of spending the time and money required up front to increase procurement of New York grown

I [can't] justify buying broccoli because it's grown here as opposed to... grown in California, because the broccoli grown in California may be cheaper. I would like to buy as much local produce as I can...but I think the bottom line comes down to following the procurement guidelines.

-KEITH GRAHAM

Food Service Director, Riverhead CSD

Prior to the incentive I would have said cost was my largest barrier, but with this new 19 cents I am not as cost sensitive as I was before.

-JOE KILMER

Food Service Director Greater Southern Tier BOCES

The amount of administrative time to separate out breakfast from lunch is so high. If you have a person designated toward that, great—but that's my biggest barrier.

-FOOD SERVICE DIRECTOR

Small school in Rochester

Because of the challenge of separating out your purchases of New York [food] and showing that those were used for a lunch program—the only way we could do that was to only serve New York product at lunch. So it does a disservice to do what we did, which was take our New York state products off breakfast, but there was no way we would ever be able to separate the breakfast New York products from the lunch New York products.

-BRIDGET O'BRIEN WOOD

Director of Child Nutrition Services Buffalo Public Schools and raised foods, secure in the knowledge that the target they are working to hit is clear and stable.

SEPARATING OUT LUNCH

Focusing this program on lunch has also created challenges for food service directors to participate. Since high-need schools are required to serve more breakfast, afterschool meals, and summer meals, when this program was created it was limited to lunch in order to keep an even playing field of access for all schools. However, this choice created unintended administrative barriers to participation, and a limitation on the program's impact on the farm economy.

Both for food service directors who don't have time to commit to Farm to School and for those who anticipated achieving 30% in year one, separating lunch purchases was reportedly difficult as it is not naturally done and takes time to accomplish.

Throughout the research, there was evidence of other unintended impacts of focusing only on lunch, including "creative accounting." Though net impacts on the farm economy are likely to be positive, some food service directors reported shifting New York food products already purchased for other meals to lunch—which could mean there will be schools that meet 30% without increasing the amount they purchase from New York farms. Limiting the reimbursement incentive only to lunch also impacted schools that had previously increased their procurement of local foods for other meals. This includes Buffalo Public Schools, who reported needing to shift New York food products from breakfast and other meals to lunch in order to qualify. Additionally, New York City reported substantial growth in their purchases of New York grown and raised food for breakfast citywide. Though they are dedicated to reaching 30% for lunch, had breakfast been included New York City would be much closer to meeting the threshold than they are now, and they would have been more greatly incentivized to quickly spend a considerable amount of school food dollars on New York grown food.

THE 30% THRESHOLD

Although 19 cents more per meal (four times what food service directors currently receive) is a considerable incentive, it is undeniable that the further schools are from 30% and the more barriers they face in buying New York food products, the less effective the incentive will be in impacting their purchasing behavior. Many schools reported 30% as a challenging goal to achieve—a very real sentiment across the state. But though it may be desirable to lower the threshold at some point, or create a tiered system for qualification, current survey results indicated that with the right support, many were optimistic that they could achieve 30% in a short time frame. Providing this support now will be critical to the success of this program's impact on the farm economy and student health.

Strategies for Success

The Right Support to Help Schools Purchase More New York Grown and Raised Food

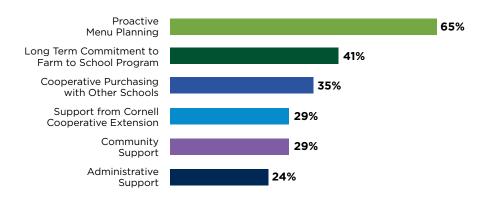


o overcome the barriers food service directors face in buying more New York grown and raised food, support must be provided quickly to build on the momentum created by this program. As part of this research, food service directors were asked to identify what they needed in order to increase their ability to purchase New York food products and reach 30% (figure 8, n=124). Additionally, those expecting to reach 30% in year one were asked to share what contributed most to their success to illuminate what food service directors need to do to increase their procurement of New York grown and raised food in the future (figure 9, n=17).

FIGURE 8. WHAT SCHOOLS NEED TO BUY MORE NEW YORK GROWN FOOD



FIGURE 9. HOW SCHOOLS MET 30%



When asked what they need, food service directors overwhelmingly responded that having more New York food products offered by their main vendor would be most impactful. This was followed by requests for:

- a list of New York producers to buy from,
- a lower threshold of 25%,
- more shelf stable or minimally processed products, and
- a matchmaker to help find farms.

This information, combined with the strategies food service directors identified as key to their success, illuminates what would be the "right support" to help schools reach 30% and unlock the full potential of this program.

Buffalo does a really great job with it because they send out a spreadsheet that indicates their NY Thursday product is squash, and schools are going to be ordering five cases each, then we know ahead of time and we can order it because we know all that product will get sold.

-AMANDA HERRSCHER

Operations and Farm to School, Boulevard Produce, Latina Boulevard Foods, serving Central and Western New York

Proactive Menu Planning and Bidding

By far, the most oft reported strategy for success in reaching 30% was proactive menu planning, with 65% of food service directors that expected to meet 30% in year one attributing it to their success. This up-front planning helped schools talk with farmers and distributors about what they needed before bidding so that vendors could pre-plant and pre-plan to provide it. Schools then incorporated these asks into bids, effectively leveraging their power as buyers to get their main vendor to provide them with more New York food products. Having schools design menus ahead of time to enable them to

incorporate requests for the New York grown and raised food they want into their bids up-front was also identified as a key need from distributors to enable them to increase the amount of New York grown food they are able to provide to schools in New York City and across the state.

Teamwork: Farm to School Coordinators and Food Service Directors Work Together to Build Successful Farm to School Programs

Farm to school coordinators came up consistently as key to helping schools purchase more food from New York farms. Farm to school coordinators help food service directors address three of the top five barriers they reported facing in procuring more New York grown and raised food: a lack of supply from their main vendor, farmer

The New York State Department of Agriculture and Markets grant and getting the farm to school coordinator was incredible. That just really set things in motion. It helped us build relationships and allowed us to work with other schools. Just someone having the dedicated time is important—it's hard to do it alone.

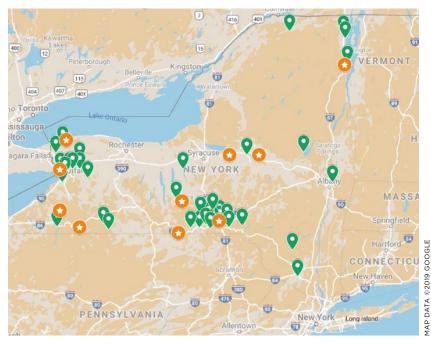
-RUTH PINO

Food Service Director, Saranac Lake CSD

delivery challenges, and a complicated procurement process. Importantly, farm to school coordinators also help address one of the main barriers that food service directors who are not currently purchasing New York food products reported—lack of staff time to do so. These coordinators can also help schools follow in the footsteps of successful schools by establishing and maintaining a sustainable Farm to School program, assisting with cooperative purchasing, and building community and administrative support.

Often funded through state and federal Farm to School grants, farm to school coordinators are paid employees located within schools, Cornell Cooperative Extension offices, BOCES, or at non-profit organizations who contribute to successful Farm to School programs. Coordinators can connect schools with farmers, assist with preparing bids, coordinate delivery logistics, and help to proactively incorporate New York food products into school menus. Additionally, they can oversee the promotional aspects of Farm to School: setting up taste tests, creating New York Thursday or Harvest of the Month programs, and encouraging the student and community buy-in that is necessary for a sustainable Farm

FIGURE 10: MAP OF FARM TO SCHOOL COORDINATORS (ORANGE) AND SCHOOLS THAT APPLIED FOR 30% INITIATIVE IN YEAR ONE (GREEN)



to School program. These coordinators are also able to help food service directors track the geographic origin of their purchases and to separate out lunch. Importantly, farm to school coordinators can also help aggregate purchasing between schools, increasing schools' buying power and enabling them to take

advantage of competitive pricing.

In interviews, food service directors that intentionally procure New York grown and raised food recognized farm to school coordinators as essential to their success. This map (figure 10), reveals at a glance how instrumental coordinators are in helping schools within their region with Farm to School activities—School Food Authorities that applied for the reimbursement in year one are in green, and farm to school coordinators are in orange. Seeing the geographic overlap of the location of Coordinators helps clarify how well they help schools within their region increase procurement of New York grown and raised food.

Geographic Preference Bids

are currently one of the only legal tools available to food service directors to use in formal bids to buy New York grown and raised food.

Most of our New York products were all very intentional relationships that we made contact with the farmer or the vendor/manufacturer to say we want this product and please deliver it to us at this day. And [the Farm to School coordinator] at CCE helped us tremendously with those connections.

- KATE DORR

Assistant Food Service Director, Oneida Herkimer Madison BOCES

Investing in Equipment and the Farm to School Supply Chain

Finally, to deliver food to schools in forms they can work with, and to address the natural issue of a growing season that doesn't align with the school year, the state of New York must also invest in more minimal processing of New York grown food, such as washing, chopping, canning and freezing, as well as value-added processing so that schools and other public institutions can access New York farm products year-round. Additionally, continued investment into kitchen equipment that enables scratch cooking and increases storage capacity at schools will help schools handle, cook, and store more farm-fresh foods.



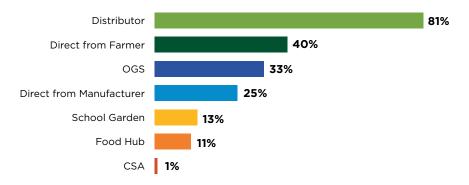
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Ensuring Success of the Farm to School Purchasing Incentive



t is also important to understand where schools buy New York grown and raised food to assess this program's potential economic impact on the farm economy. Distributors came up in survey responses and follow-up interviews as important players in getting more New York food products into schools, securing food service contracts that can last between a few months to several years in the case of New York City. According to survey responses, food service directors reported purchasing New York food products most often from distributors, followed by farmers, Office of General Services, or OGS, and manufacturers (figure 11, n=118).

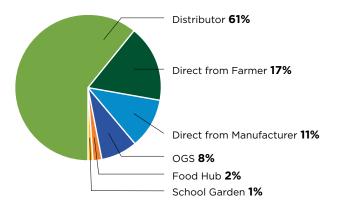
FIGURE 11. SCHOOL SOURCES FOR NEW YORK FOOD PRODUCTS IN 2018-19



Looking more closely at where food service directors spent the majority of their money on local food, 61% spend the most on New York food products from distributors, followed by 17% directly from farmers, and 11% directly from manufacturers (figure 12, n=85).

As identified in the list of needs, increasing the amount of New York food products offered by a school's main vendor, most often distributors, is an important, easy, and convenient way to help schools procure more local food. However, it is also critical to ensure that the geographic origin information that schools base their accounting on to ascertain whether they reached 30% is accurate.

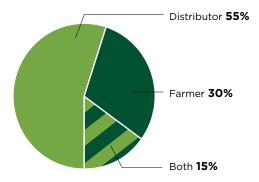
FIGURE 12. SOURCES FOR NEW YORK FOOD PRODUCTS BY DOLLAR VALUE



Tracking Geographic Origin of Food Purchases

According to this survey, most food service directors rely on paperwork from their vendors, such as distributor invoices and manufacturer product formulation statements to calculate the total dollar amount and percent of their budget that they spend on food from New York farms, viii which forms the basis for their determination of whether they reached the 30% threshold. When asked whether their School Food Authority had its own system to track the geographic origin of the food they purchase, 58% of food service directors reported having no such system. Of the 42% that do, 70% relied on

FIGURE 13. HOW SCHOOLS TRACK GEOGRAPHIC ORIGIN



I think it's really challenging for broadline distributors to source identify all the way through their system just based on how their software programs work. I am sure there are workarounds, but for most distributors it's not something they are accustomed to doing....It's expensive. And for the vast majority of their sales it's not important, so why would they invest in that ability to do that?

-SILAS CONROY

Supply Chain Manager, Headwater Food Hub

their distributor for information indicating the geographic origin of their food purchases, with 55% relying on their distributor alone (figure 13, Responses=47). Therefore, making sure that guidelines for the Farm to School Purchasing Incentive produce accurate geographic origin information from vendors will be necessary to ensure this program benefits the farm economy and increases student access to local food.

According to incentive program guidelines released in December 2018, to receive the increased reimbursement School Food Authorities are required to provide an affidavit to NYSED signed by the School Business Official, who is accountable for the accuracy of their claim. In addition, they were told that they needed to provide basic accounting information to NYSED, including invoices, receipts, and product formulation statements in order to prove that they spent 30% of their lunch food budget on food from New York farms. This was set up to be both easy for schools to use and for NYSED to track and verify. However, schools reportedly are still unclear as to what paperwork they will be required to retain to prove the products they bought were from New York farms, and that they achieved 30% spending on New York food products.

Maintaining the Integrity and Success of the New York Farm to School Purchasing Incentive

The supply chain that brings food from farms to the school loading dock is opaque and can be long, sometimes involving multiple actors once the food leaves the farm. Once food is delivered to a distributor's warehouse or goes through processing at a manufacturer, unless there is special attention paid, there is no guarantee that that food will retain the accurate geographic origin information that it left the farm with. Notably, there are distributors and food hubs that help schools track their New York purchases, and whose businesses are set up to provide verifiable sourcing information,

viii For processed products (including freezing, canning, butchering etc.) NYSED requires product formulation statements from the manufacturer certifying that 51% of the raw ingredients by weight or volume came from NY farms.

but not all distributors are adequately equipped or motivated to identify the geographic origin of the food they sell with accuracy. Further, school business officials, food service directors, and NYSED staff responsible for auditing 30% claims don't have the time or the expertise to verify the New York farm origin of food labeled as "New York Grown" on invoices and receipts—that ability lies only with those that bring the food from the farm to the school.

This presents an urgent problem that must be addressed in order to ensure that the New York Farm to School Purchasing Incentive grows while using taxpayer dollars responsibly. The integrity of the New York State Farm to School Incentive and whether it truly supports New York farmers will rest on the school and the state's ability to verify the accuracy of the geographic origin information of food purchased and served to students.

But success of the incentive program will also rely on establishing guidelines for verification that are achievable and which remain consistent, requiring the right available paperwork that will yield ongoing accurate information from distributors and manufacturers. Creating new clear and consistent requirements that ensure schools base their calculations on accurate geographic origin information and incorporating these into the program's guidelines is essential. These new standards must take into account the real time constraints food service directors face on a daily basis, as well as the realities of what farm and food businesses can provide, so that they are implementable, based on the information schools and distributors are able to procure. And finally, these new program guidelines must be clear, and consistently applied so that schools and We create separate account numbers for schools that communicate to us that they are interested in participating in the NYS Initiative, so they have an account for [that]. This allows me to generate a report that lets me pull out all of their invoices that they purchased under the NYS Initiative so they can track what they have purchased.

-AMANDA HERRSCHER

Operations and Farm to School, Boulevard Produce, Latina Boulevard Foods, serving Central and Western New York

We have been working with schools for years trying to get Farm to School to happen. When our customers get invoiced from us, and when they get two bags of carrots from two different producers, they will actually be different line items on their invoice from each producer.

-SILAS CONROY

Supply Chain Manager, Headwater Food Hub



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distributors can gather and prepare the necessary verification paperwork before their application review will take place the following year.

NEW YORK CITY CASE STUDY

he New York City school district, and the Department of Education Office of Food and Nutrition Services (OFNS), is a special and important case study in New York grown and raised food purchasing for schools. New York City's OFNS provides meals daily to over 1.1 million students with a total food budget of \$240 million. The New York City school system is a collection of public, non-public, and charters consisting of over 2,000 schools spread across 1,700 buildings citywide. In total, food procurement for the city operates through six regionalized contracts and is serviced by four distributors. Due to the extremely complex and multi-office bidding process associated with a School Food Authority so large, New York City differs from other SFAs' annual and biannual purchasing by bidding their contracts on a three-to-five-year basis.

- 66 You just need to look at our students' faces. When you do FTS activities such as planting a school garden, bringing a student to a farm or having a farmer meet the students in a school, it is an impression that will last with that child for their life. It's as simple as that. >9
- 66 We've been working very hard to create additional opportunities for local products to be brought into our system, we highlight local Thursdays, creating a lightning rod to a particular day of the week that wakes industry up to realize that we're interested in local. 22

New York City's scale presents both opportunities and challenges to the procurement of New York grown food. Their scale allows them to make innovative changes without being constrained by the financial pressures many smaller schools report as limiting their Farm to School efforts. However, when compared to these smaller School Food Authorities, New York City has decreased flexibility and autonomy in their food procurement decision making, and is subject to city procurement regulations that may make it difficult for them to take actions to procure local food. Many smaller SFAs can find success with the New York Farm to School Purchasing Incentive through informal bids and small and micro purchases. As dictated by financial thresholds set forth in federal and state procurement regulations, these options are unavailable to a district as large as New York City. Scale acts as a limiting agent once again when you consider standardizing a menu plan for over 1,300 kitchens that vary in age, capacity for cooking, and

equipment. However, because of their scale, if they were to reach 30% New York City could have a greater impact on the farm economy than all other districts in the state.

But nevertheless, the district remains optimistic about the future of Farm to School in New York City and hopeful about its ability to reach 30%. Stephen O'Brien, Director of Strategic Partnerships at New York City Office of Food and Nutrition Services, explains, "the 30% initiative is very encouraging, and I think we are all excited about it. We have to keep the money [in the state budget for this program] because it's going to take New York City 3–5 years to get there. We have not wavered from that point of view. What has been great about the initiative is that it energized our team to take advantage of this great opportunity."

While the Big Apple is motivated to push towards 30% and stimulate local market growth, the initiatives' guidelines do pose some structural challenges. New York City has dramatically expanded their breakfast programs in the last five years through breakfast in the classroom initiatives and Breakfast after the Bell. As a result, the exclusion of breakfast from the incentive program took New York City's OFNS farther from the





30% than they initially had hoped. The decision made in the program guidelines process to exclude commodity dollars spent on New York food towards the accounting to get to 30% created an extra challenge for New York City, which spends \$36 million annually through the commodity program.

OFNS's efforts to increase both lunch and overall local purchasing have not diminished. Through a Farm to School grant, the city was able to hire a farm to school coordinator to help them understand what opportunities exist to improve their local purchasing. Acting as a third-party evaluator, the Coordinator was tasked with assessing the city's food distribution model to educate and inform the Office of Food and Nutrition Services as they develop future distribution contracts. Getting local product into schools in the middle of a New York City business day is a logistically challenging

66 Our greatest joy is that we get to make a difference in the lives of a million students, the largest school district in the country and if we can figure out ways to do that it should be something that can be replicated.

66 Our biggest frustration is that a smaller school district is typically more nimble in creating programs, pilots, or even relationships with farms because they're smaller or their proximity to them is closer.

undertaking, but the SFA is dedicated to evaluating their supply chain to ensure success.

While many schools report working directly with growers, the scale of New York City along with local regulations makes this method of procurement next to impossible. The city indicated the limited capacity of the local market to meet their demand as one barrier to their purchasing of local. Their unique needs include greater supply aggregation, potentially through a co-op model to ensure small and medium-size farms don't have to assume all the risk of selling to schools. With the strategy of including all food purchased for meal programs and commodity foods, New York City anticipates reaching the 30% initiative more quickly than expected. This would be an amazing achievement, representing millions of dollars in economic opportunity annually for New York farmers; driving innovation and building the supply chain for other schools across the state, while feeding more healthy, fresh local food to 1.1 million New York City students every day.

Quotes provided by Stephen O'Brien, Director of Strategic Partnerships, New York City Office of Food and Nutrition Services



Recommendations



his research revealed evidence that with the right support the New York Farm to School Purchasing Incentive does, and will continue to significantly increase school food purchases from New York farms. Generally, food service directors feel optimistic about their future ability to purchase more New York grown and raised food, and if the state of New York were to provide the right support and guidance now, many more schools can be expected to achieve the 30% threshold in the coming years. The state of New York and organizations across the state have made significant investments to create the Farm to School support system, but more must be done now to build on this progress and the forward momentum of these new programs to unlock the full potential of this initiative to grow our farms and our students' access to local food. Updated guidelines must be also be created to clarify expectations and ensure that taxpayers, farmers, and our kids receive the benefits they expect. Implementing the following recommendations will put more schools on the pathway to achieving 30%, while ensuring program integrity and longevity.



Codify and Continue to Fund the New York Farm to School Purchasing Incentive and New York State Farm to School Grants Program

The State of New York must commit to continuing to fund the Farm to School Purchasing Incentive and the Farm to School Grants program long term. For many food service directors, it will take time to build Farm to School purchasing and achieve 30%. Making a commitment to fund this program



NANCY J. PARISI

We have to keep the money [in the state budget for this program] because it's going to take New York City 3-5 years to get there.

-STEPHEN O'BRIEN

Director of Strategic Partnerships, New York City Office of Food and Nutrition Services

Don't try to go from zero to 100 all at once. It's really a slow and steady process. Get educated, look for resources, look for best practices, attend conferences, learn and listen. Take those small pieces of what people are doing and just try one thing at a time. Try something small and make it successful and as you do that you're going to get buy in from the team.

-MARK BORDEAU

Senior Food Service Director, Broome-Tioga BOCES

long term while investing in the support that schools need through the Farm to School Grants program will help school administrators and food service directors feel secure investing the time and money necessary to increase local purchases and achieve 30%. In addition to re-appropriating funding annually, the state of New York should pass legislation to make these programs a permanent feature of state farm and food policy.



Invest in Regional and Statewide Farm to School Coordinators Across New York

When asked what would be most helpful in increasing their ability to procure New York grown food, food service directors responded with a suite of requests that farm to school coordinators often fulfill. Currently, there are geographic gaps throughout New York where a farm to school coordinator could improve those schools' abilities to buy local food. Additionally, farm to school coordinators have reported that they would benefit from improved information sharing between regions so that they can learn from others' success. Therefore, it is recommended that the state of New York create and fund a network of regional farm to school coordinators that cover all areas of New York state, and who are overseen by one central organization to improve their ability to service the needs of schools and farms, and share best practices. This could be done through the current Farm to School grants program or by creating a new coordinator program in the state budget. Over time, regional farm to school coordinators could establish regional online marketplaces where schools and farmers can connect and their support could expand to other institutions, such as hospitals, emergency feeding outlets, and universities, to help them procure more locally grown food for their cafeterias.



Create Consistent, Clear, Stable Guidelines on How to Qualify for the New York Farm to School Purchasing Incentive

Because schools must invest time and money into achieving 30% for at least a year before they find out whether they have qualified, they need clear, stable, consistent guidelines to follow in order to take the risk and invest. Schools that are interested in increasing their purchasing of New York grown and raised food to achieve the 30% threshold need to better understand which New York food products qualify, and what paperwork and information will be necessary to prove they achieved 30%. The State of New York should create these guidelines with stakeholder feedback, release them as soon as possible, and commit to following them for at least two years so that schools are able to plan effectively. This will ensure the positive forward momentum and interest this program has created in Farm to School continues to grow to its full, enormous, potential.



Incorporate Stronger Accountability Measures to Ensure Integrity in Geographic Origin Labeling While Maintaining Program Growth

This research revealed that distributors and other intermediaries between farms and schools are often the sole providers of the geographic origin information schools rely

on to account for how much they spend at local farms. To ensure the integrity of this program—and that it uses taxpayer dollars responsibly—NYSED and NYSDAM must find ways to guarantee accurate geo-labeling from distributors and other school food vendors and build these into program reporting requirements. These requirements must remain consistent, yielding accurate information while also being achievable based on the limitations food service directors face. Further, they must be developed through stakeholder feedback—including food service directors, food industry professionals, distributors, manufacturers, and farmers—so that the requirements are achievable and will yield the most accurate information. Such measures could also spell out clear consequences for distributors and manufacturers that provide inaccurate information. With these mechanisms built into the program, the state of New York can safely know that tax dollars are going to their intended purpose: supporting New York farmers while increasing access to New York grown food for children.

5

Increase Training and Support for Food Service Directors

State agencies, non-profit organizations, farm to school coordinators, and School Food Authorities that successfully procure New York grown and raised food should be supported in providing trainings, sharing information, and communicating best practices to other schools to set them on the pathway to increasing local procurement and reaching 30%. Topics for increased future training and support should include:

- How to procure New York grown and raised food;
- How to participate in the New York Farm to School Purchasing Incentive program, what can and cannot be included in the accounting to achieve 30%, and what paperwork is necessary to prove compliance to the state of New York;
- How to procure more New York grown food in accordance with federal, state, and local regulations, including how to write bids to procure local food and execute small and

micro-purchases;

- How to plan kid-friendly, seasonal menus that include local food to inform a bidding process that communicates what schools need to their vendors;
- How to easily create Harvest of the Month,
 New York Thursday, taste tests, and other Farm to School programming for your school;
- How to conduct a baseline assessment to see how close your school is to reaching 30%;
- How to track purchases of New York food products; and
- How to separate out lunch purchases.

So as long as it follows the bid I can buy it. But I can't go out and go to a farm and say 'Hey I want to buy from you' because I have to bid it. I have to be within the procurement rules and in New York state you have to bid product.

— FOOD SERVICE DIRECTOR

Small school in Rochester

Start with your milk—that more than likely gets you halfway there. My milk was over .30 cents last year, and this year it's a lot less, but it will still get me halfway. Then it's another \$14,000 I will have to spend to get my \$15,000.

-ROSEMARIE HANSON

Food Service Director, Trumansburg Schools





Pass Federal and State Legislation to Enable More Farm to School Purchasing

Food service directors must work within a complicated regulatory environment to retain a competitive and fair use of tax dollars, but these laws often hinder the flexibility necessary to spend dollars at local farms. Reforming federal procurement laws to make it easier for food service directors to purchase locally grown food in bids is necessary.

In addition, state and local lawmakers should pass legislation to enable food service directors to have the flexibility to spend food dollars at New York farms. This includes:

- Increasing the Small and Micro-Purchase Thresholds for food procurement to increase the amount schools can easily spend at local farms through informal methods, as was attempted with State Bill S.4281/A.5689 in 2017.
- Passing "Price Percentage Preference" legislation that authorizes School Food
 Authorities to award contracts to purveyors of New York grown and raised food when
 it isn't the least cost option, so long as their price is only a certain percentage, usually
 10% or 15%, above the lowest bid.



Invest in Farm to School Capital Projects across New York

The lack of alignment of the growing season with the school year can be addressed effectively with more shelf-stable New York food products. The state of New York should invest in building capacity across New York to increase value-added processing ability. Additionally, increasing the amount of minimally processed farm fresh food available to schools will ensure they receive foods in forms they can handle. Finally, the state should continue to invest in kitchen and storage equipment at schools so that they are more equipped to store, handle, and cook fresh New York grown and raised food.



Expand Beyond Lunch

This incentive program was created to reward schools that spend 30% of their lunch food costs on New York grown food. However, many schools serve breakfast, after school snacks, and summer meals during prime growing season, which could also feature New York food products like yogurt, cheese, grains, eggs, apples, and other fruit and vegetables. As schools work to buy more New York grown and raised food and meet the 30% goal over the next five years, the state of New York should add a similar incentive for all other meals, including breakfast, after-school meals, and summer meals to remove administrative barriers to achieving the incentive while increasing economic impact and improving access to local food for students throughout the school year.

Conclusion



he New York Farm to School Purchasing Incentive is a nation-leading program that is poised to revolutionize school food and what students eat in cafeterias statewide. Expanding this program and providing increased support and training to food service directors could unlock its full economic potential. In order to achieve this, it will be critical to invest in farm to school coordinators, train food service directors on how to procure New York grown and raised food, create clear and realistic program guidelines, strengthen the accuracy of geographic origin labeling provided by school food vendors, and pass legislation to make it easier for schools to spend food dollars at local farms. If state leaders and lawmakers were to take these important actions now, it could increase access to local food for



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almost 700,000 students while injecting nearly \$150 million into the state farm economy with a total statewide economic impact of over \$210 million by 2024.

Looking Ahead: Recommendations for Further Research

The scope of this research was confined to studying the demand side of the Farm to School procurement relationship. In order to continue to build Farm to School purchasing, further research is now needed to identify:

- New York farmer barriers in selling to schools or answering school bids, and how to provide further support to farmers interested in selling to schools;
- Specific gaps and needs in the supply chain, particularly for value added products and minimal processing of fresh fruits and vegetables^{ix}—to address the challenge posed by a growing season that does not align with the school year;
- Federal procurement regulation changes that can improve schools' ability to purchase local food;
- Economic impact of this incentive program by commodity—including a
 determination of how much market activity can be attributed to this initiative alone;
- Public health impact of the program based on what schools are purchasing more of, and how this is affecting student diet at school and at home; and
- Opportunities for additional incentives to help schools and other institutions purchase fresh, healthy, and minimally processed foods grown and raised in New York.

ix According to the USDA booklet released on Farm to Institution in 2017, a \$4.5 billion investment in the local supply chain is needed just to increase the consumption of locally produced food by 20% in the Northeast.

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Appendix



Methods

The New York Grown Food for New York Kids Farm to School Survey was conducted by American Farmland Trust to better understand procurement of New York food products by School Food Authorities, or SFAs. The survey was designed to evaluate whether SFAs were able to meet the 30% threshold and engage with the New York State Initiative. Questions aimed to identify challenges and barriers to purchasing New York grown food and to better understand ways that future state Farm to School policy and program choices can be improved upon and made more effective.



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The survey was conducted in June and July of 2019 to assess food procurement practices during the 2018–19 academic year. Survey questions were designed by AFT staff and evaluated by the Farm to Institution New York State leadership team, the New York Grown Food for New York Kids Coalition, the New York School Nutrition Association, New York Department for Agriculture and Markets, and the New York State Education Department. Thanks to the New York State Health Foundation, the research was also supported by a program evaluation team at New York University School of Medicine. Language and terminology used in the survey reflected vocabulary common to existing New York Farm to School materials and other state agencies and were in-line with the policy initiative. Supplementary survey materials included a definition of terms for further clarification.

Contact information for food service directors and school business officials was obtained from NYSED. After removing duplicate and noneligible entries, the final data set consisted of 856 unique public, private, and charter K–12 New York School Food Authorities. From this target population a simple randomized sample of 303 was created that was statistically representative of each county's total school and student population. The cross-sectional study was conducted online through SurveyMonkey and remained open for five weeks. Food service directors were invited to complete the survey via emails sent from American Farmland Trust. Follow-up outreach emails were sent from the New York State Education Department and letters of endorsement were circulated from the New York Department of Agriculture and Markets and the New

York School Nutrition Association. In the final weeks, telephone calls were used to increase response rate and encourage participation.

STUDYING BARRIERS

This research was designed in part to uncover the top barriers food service directors face when looking to purchase New York grown food for their schools. Respondents were asked to choose their top five most significant barriers to purchasing New York grown food from a list of 25 potential procurement challenges. Food Service Directors were also given the option to write in a barrier if it was not included in the provided list. Respondents were then asked to rank their selected barriers on a five-point scale from (1) most challenging to (5) least challenging. Barriers were then given a multiplier value. Barriers ranked 1 were given a multiplier value of (x5), 2 (x4), 3(x3), 4(x2) and 5(x1). Total scores yielded the final list of barriers (in descending order) of cost, growing season, main vendors not offering New York Food Products, farmer delivery challenges, and procurement regulations.

MEASURING ECONOMIC IMPACT

One driving goal of this research was to estimate the potential economic impact of the New York Farm to School Purchasing. To do this, average daily lunch participation, or ADP, figures were used to project the economic contribution of schools that anticipated meeting the 30% threshold within the next five years. The number of students that would receive increased access to New York grown food each year was calculated using a simple formula for each year:

ADP for surveyed SFAs that anticipate	
meeting 30% each year	_ X number of students affected
ADP for total survey sample	Statewide total ADP

Based on New York Farm to School Purchasing Incentive application data submitted to NYSED, at the time of this report's publication schools reported a collective \$5,564,783 in local spending through their lunch programs in the 2018–19 academic year (program year 1). This dollar amount was used for program year 1 economic contribution in lieu of projected figures through ADP.

Program year 2 economic contribution was calculated through survey participants' response to Q23, in which data indicated that the number of SFAs anticipating reaching

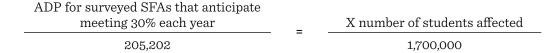


30% spending in the 2019–20 academic year doubled when compared to year 1. Therefore, ADP figures from program year 1 were doubled resulting in an ADP of 151,779 for program year 2. Using responses to survey Q24 based on the % of SFAs that anticipate meeting 30%, total ADP figures were calculated for program years 4, 5, and 6. With these numbers, year 3 ADP was calculated using mathematic interpolation.

Statewide ADP data was obtained from NYSED for the 2018–19 school year. ADP figures for the

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months of September—June were averaged to produce a single ADP for each school in the survey sample. A single ADP for the state of New York of 1.7 million was used for lunches served daily statewide. The sum total ADP for the survey sample was 205,202 lunches served daily, resulting in the formula:



In the survey sample, 34 SFAs indicated that they felt optimistic that with the right support they would meet the 30% threshold in 3 years (program year 4). An additional 14 SFAs anticipated achieving success in 4 years (program year 5), and 7 more believed their schools could meet the 30% in 5 years (program year 6). Table 1 represents the cumulative sum total ADP for each response category to survey Q24.

TABLE 1. SURVEY Q24 RESPONSE DATA

Program Year	Cumulative Number of SFAs	Cumulative Total ADP from Survey Q24	Percent of Students Enrolled in Lunch Programs Achieving 30% in Survey Sample	X Number of Students Served Daily in New York Through 30% Lunch Programs
4	34	35,281	17%	289,000
5	48	57,956	28%	476,000
6	55	64,823	32%	544,000

Survey response ADP was then projected out to represent the entire state of New York, as seen above. To do this, the percent of New York students that participate in lunch programs that achieve the 30% threshold was found by dividing the cumulative total ADP in each response category by the sum total ADP for the survey sample. These values were then used to project statewide values to generate the potential number of students impacted daily through lunch programs that meet the New York Farm to School Purchasing Initiative's guidelines (Table 1, columns 4 and 5).

Assuming all schools that achieve 30% spending in program year 2 continue to meet the threshold in subsequent years, ADP from year 2 was added to program years 4, 5, and 6 to generate total cumulative ADP figures.

Due to the manner in which survey Q23 was asked, data was missing for program year 3. To resolve this, year 3 ADP was calculated through interpolation using ADP figures from program year 2 and 4 to estimate the ADP of program year 3. These calculations estimate program year 3 ADP to be 306,332.

To uncover the economic impact of the Initiative, the daily number of students participating in lunch programs anticipated to reach 30% local spending was multiplied by \$1.20—the average amount spent on food for school lunch in New York state. This produced an estimated collective daily dollar amount spent on K–12 lunch programs across New York as a whole. Thirty percent of this figure was then calculated and multiplied by 180, the number of school days New York schools are required to remain open, to produce an annual dollar amount spent on New York food served in K–12 lunch programs based on the survey data results.

TABLE 2. ECONOMIC IMPACT OF THE NEW YORK FARM TO SCHOOL PURCHASING INCENTIVE

Program Year	School Calendar Year End	Average Daily Participation	Amount Spent
1	2019	75,889	5,564,738
2	2020	151,779	9,835,214
3	2021	296,278*	19,198,814
4	2022	440,778	28,562,414
5	2023	627,778	40,680,014
6	2024	695,778	45,086,414
			148,927,608

TOTAL STATEWIDE ECONOMIC IMPACT CALCULATIONS

Economic impact studies measure the changes in spending in a geographic area that would result from a hypothetical change in economic activity. This type of analysis calculates the cumulative amount of money that cycles through the economy among industries, households, and government agencies, as a result of the change.¹

In this report, total economic impact was calculated as a combination of the direct, indirect, and induced effects of increased school spending on New York grown, processed, or produced foods. The dollars flowing into the New York state economy from schools purchasing local food for their lunch programs is captured by the direct effect. The indirect effect is the dollars generated by farms and food suppliers purchasing inputs (from seeds to heavy equipment) and hiring workers. The induced effect comes from changes in household income and the dollars that flow into the economy from day-to-day purchases by employees of those farms, food processors, and distributors.

Research on multiplier effects shows that multipliers typically fall between 1.4 and 2.6, indicating that with each locally-spent dollar, an additional 40 cents to \$1.60 is generated for the local economy instead of going elsewhere. Based on a 2014 study by Cornell University wherein a multiplier was developed to calculate the contribution from agriculture on the New York economy, a modest economic multiplier of 1.43 was used in this report's calculations. A final potential economic impact of \$212,966,479 was found by applying this multiplier to the total estimated spend on New York food through K-12 lunch programs.

In line with other studies, this calculation does not assume new or additional purchases of food by schools, but rather a shift from non-local to local purchasing through substitutions. Additionally, the total estimated amount spent by New York schools does not differentiate new school spending on New York products from existing local purchases that were in place before the incentive, nor does it account for products that may have been purchased for breakfast or other school meals simply being shifted to lunch. However, estimates likely represent a lower bound on the potential economic impact and net benefit given that the calculations do not consider local food purchases that are served in school meals other than lunch.

Finally, these estimates are conservative because they calculate by percentage of students as part of the total number of students eating at schools in New York State, and not by the real distribution of students at schools statewide. Because of this, these numbers do not account for the specific direct or indirect impacts of New York City reaching 30%, just the number of students impacted as a percentage of the total. As seen in their case study, if New York City met 30%, the impact would be substantial both in economic terms, and in increasing access to local food for over 1 million students at once.

MEASURING COST

This research also sought to calculate the costs of implementation incurred by New York state associated with increasing the amount schools spend on New York grown food enough to reach 30%—both in support and through increased per-meal-reimbursement payments.

This data suggests that the state will pay out an estimated \$78,259,176 in reimbursement funds to schools that reach the 30% threshold over the next five years. This figure was calculated by multiplying the average daily participation, or ADP, numbers generated in Table 3 by the increase in the state's per-lunch-meal reimbursement (19 cents) from academic year 2017–18. This number represents the cost per day to the state in reimbursement funds, which was then multiplied by 180 to find total annual cost. The final column reports the cumulative expenditure across the projected five-year time period.

This report recommends that New York state invest in Farm to School coordinators across the state as part of the Farm to School Grants program in order to provide critical support to food service directors to increase their purchases of New York grown and raised food. Therefore, the state should increase the total number of Farm to School coordinators to adequately service the entire state. For this report's calculations,

the number of Farm to School coordinators used to reflect both BOCES districts and potential inter-county collaboration was 45. Additionally, the quality of candidates and sustainability of these positions will determine their success, therefore Farm to School coordinator salaries were calculated at the amount of \$50,000/year for a total of \$2.25 million per year.x Finally, an additional \$1.75 million was included in this amount to sustain investments into necessary training and

TABLE 3. COST OF INCENTIVE REIMBURSEMENT AND PROGRAM SUPPORT TO NEW YORK STATE

INCENTIVE REIMBURSEMENT		FTS GRA	NT PROGRAMS		
Program Year	Calendar Pay Out Year	Average Daily Participation	State Pay Out	State Fiscal Year	State Investment
1	2020	75,889	2,595,404	2019	_
2	2021	151,779	5,190,842	2020	_
3	2022	296,278	10,132,708	2021	4,000,000*
4	2023	440,778	15,074,608	2022	4,000,000
5	2024	627,778	21,470,008	2023	4,000,000
6	2025	695,778	23,795,608	2024	4,000,000
			\$78,259,176		\$16,000,000

^{*\$4,000,000} annually to fund 3-track grant program: FTS Coordinator, Training, and Equipment

x Salary figures for FTS Coordinators chosen to allow for New York state investment calculations. Actual figures are subject to change to best finance a state-wide network to support Farm to School purchasing efforts.

TABLE 4. SCHOOL CHARACTERISTICS

Total Fo	ua llua a uak	
Total En		
0-2500	73%	
2501-5000	16%	
5001-7500	7%	
7501-10,000	3%	
10,000+	2%	
Average Daily Lu		
0-500	44%	
501-1000	27%	
1001-1500	10%	
1501–2000	6%	
2000-2500	5%	
2501-3000	1%	
3001-3500	3%	
3501-4000	1%	
4000+	3%	
Percentage of Stude	nts Eligible for FRPL	
0-10	4%	
11-20	7%	
21-30	14%	
31-40	12%	
41-50	23%	
51-60	12%	
61-70	6%	
81-90	4%	
91-100	12%	
CEP E	ligible	
Yes	37%	
No	63%	
Received or Benefitt	ed from a FTS Grant	
Yes	17%	
No	83%	
Intentionally Purchase Ingredients from New York State Farms to Use in School Meals		
Yes	74%	
No	26%	
	entionally Purchasing ood Products	
1-2	37%	
3-4	17%	
5-6	21%	
7-8	8%	
9-10	8%	
10+	9%	
101	570	

equipment. The cost to New York state for this renewed grant program would be \$4 million per year at \$16 million total. Calculations for the total economic cost of the reimbursement initiative and program support positions are detailed in Table 3.

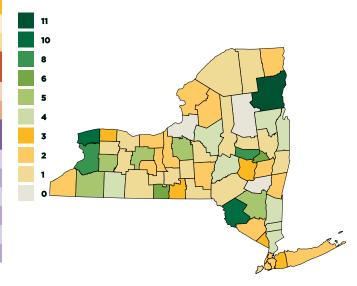
Currently the State of New York funds and supports Farm to School activities through a single grant pool. Changing the grant program to resemble the 3-track federal Farm to School grant program administered by the USDA would allow for funds to be dedicated separately for Farm to School Coordinators, training and education, and investments in equipment to support Farm to School efforts. When calculating these costs to New York state, year one and two of the program (academic year 2018–19 and 2019–20) were omitted as these state funds have already been appropriated.

Sample and Response Rate

In total, 179 of the 303 School Food Authorities completed this survey; resulting in a response rate of 59.3%.

The sample included at least one district in every New York state county. Together the respondents represented 59 out of the 62 counties statewide, with 95% of counties represented in this report (Figure 13). The 3 counties with no response were

FIGURE 13. # OF RESPONDENTS BY COUNTY



Greene, Hamilton, and Oswego. The region with the highest number of individual respondents was Essex County (18.3%).

Table 4 describes characteristics of respondent SFAs during the 2018/2019 school year. Almost half of the School Food Authorities (44%) had an average daily lunch participation of 500 or less, with the majority of SFAs (87%) serving 2000 or fewer lunches daily. The largest district included in the sample was Buffalo City Public Schools, reporting an average daily lunch participation of 29,000.



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One in five SFAs (23%) reported that between 41–50% of their students qualified for the Free and Reduced Price Lunch program. This is consistent with the 2017–18 statewide average of 46% FRPL eligibility.⁴ 37% of the responding sample were CEP eligible and able to offer breakfast and lunch at no charge to their students.

Less than a quarter (17%) of our respondents have received or benefitted from either a federal or state Farm to School grant. Of the programs that were enhanced by grant funds, almost 75% of the grants were awarded to a partner of the school. These grants were used equally for staff, training, and equipment.

Most School Food Authorities (74%) surveyed indicate that they intentionally purchase New York grown and raised food to serve in their meal programs. More than half (63%) of these SFAs have been buying local for more than two years. One in four respondents report making these intentional purchases for seven years or longer—indicating that farm to school has been a long-time mission for many of these New York schools.

Limitations

One driving intent of this research was to better understand how school food buyers interacted with the New York State Farm to School Purchasing Incentive, and questions asked in this survey reflect procurement activities for the entire 2018–19 academic year. One limitation of this research is the program is in its pilot year, and schools, distributors, farmers and others are still figuring out how it will impact their behavior. Additionally, guidelines for the program were not released until December 2018—halfway through the school year and many months after contracts were secured, potentially limiting its impact on purchasing behavior in year one. Thus, responses and reactions regarding the initiative may not capture its full impact or potential reach.

The timing of this research may also have resulted in a lower than target response rate. The survey opened on June 6, 2019, and coincided with the end of the academic school year—a busy time for food service directors who were tasked with transitioning their staff to summer schedules and reconciling year end budgets. Due to this, some individuals indicated they were not able to participate in the research.

Despite the efforts to create a weighted research sample representative of New York state as a whole, responses to the survey were voluntary and not incentivized. Due to this, selection bias may be present in some data. Additionally, not all respondents

provided responses to all survey questions. For this reason, the results presented in this report are question specific and the response rate is indicated with all data findings.

Economic impact and cost calculations were completed with the best available data. The reported ADP and amount of budget spent on local food in year 1 were based on figures provided by NYSED at time of publication. These numbers are subject to change while schools undergo procedural audits by the department to verify the legitimacy of their New York purchases. Additionally, because ADP numbers were unavailable for program year 3, they were interpolated by using year 2 and 4 projections.

Finally, economic impact calculations were based on a \$1.20 average amount assumed for all schools spending per meal on food, which may be an unrealistically low or high amount for many schools. New York City was excluded from the total economic calculations and would significantly change the impact and cost figures if they achieve 30% spending by program year 6.

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Glossary

of Terms and Abbreviations



ADP	Average daily lunch participation, or the average number of students that eat meals served in the school cafeteria
AFT	American Farmland Trust
Community Eligibility Provision (CEP)	Non-pricing meal service option for schools and school districts in low-income areas
Farm to School	Programs, policies, or interventions intended to enrich the connection communities have with fresh, healthy food and local food producers by changing food purchasing and education practices at schools and early care and education settings. Farm to School implementation differs by location, but always includes one or more of the following three core elements of Farm to School: (1) Procurement: Local foods are purchased, promoted, and served in the cafeteria or as a snack or taste-test; (2) Education: Students participate in education activities related to agriculture, food, health, or nutrition; and (3) School gardens: Students engage in hands-on learning through gardening. Farm to School empowers children and their families to make informed food choices while strengthening the local economy and contributing to vibrant communities.
Farm to School Coordinator	Work with SFAs to support overall FTS mission. Often a grant funded position, responsibilities include integrated educational activities, school gardens, FTS promotional events, and creating relationships that increase the volume of local food in school meal programs.
FINYS	Farm to Institution New York State
Food Service Director (FSD)	The person responsible for planning student menus and ensuring they meet child nutrition guidelines. Additionally responsible for training employees, coordinating serving schedules, ordering supplies, and maintaining food preparation equipment.

Free and Reduced Price Meals	Schools are required to serve meals at no charge to children whose household income is at or below 130 percent of the Federal poverty guidelines. Children are entitled to pay a reduced price if their household income is above 130 percent but at or below 185 percent of these guidelines. Children are automatically eligible for free school meals if their household receives food stamps, benefits under the Food Distribution Program on Indian Reservations or, in most cases, benefits under the Temporary Assistance for Needy Families (TANF) program. The percentage of students receiving free or reduced price lunch is often used as a proxy measure for the percentage of students living in poverty. Schools with over 70% FRPM are considered "highneed" schools.
New York Food Product	Encompasses food items that are grown, harvested, or produced in New York State (NYS); or a food item processed inside or outside NYS comprising over 51% agricultural raw materials grown, harvested, or produced in NYS, by weight or volume.
New York Grown Food for New York Kids Coalition	Established in 2017 by AFT to advocate for programs and policies that will further remove barriers to participation in Farm to School across New York state.
No Student Goes Hungry Initiative	A comprehensive program established in 2018 to address food insecurity by banning lunch shaming, requiring breakfast after the bell, expanding the Farm to School program, increasing access to farm-fresh foods for all public school students from kindergarten through high school, and requiring all SUNY and CUNY public campuses to have a food pantry and/or free food access
Procurement	The process of specifying and buying food and goods for schools. All SFAs must comply with procurement regulations. Informal procurement occurs when a school food authority's purchases fall at or below the Federal, State, or local small purchase threshold (whichever is more restrictive). When purchases exceed the threshold, formal procurement rules must be followed. Within formal procurement there are two methods available: Competitive Sealed Bidding (commonly referred to as sealed bidding and uses an invitation for bid or IFB) and Competitive Negotiation (which uses a request for proposal or RFP).
School Food Authority (SFA)	The governing body that is responsible for the administration of one or more schools and which has the legal authority to operate a nonprofit school food service therein or otherwise approved by FNS (Food and Nutrition Service of the Department of Agriculture) to

operate the NSLP (National School Lunch Program).







