

District of Columbia Healthy Schools Act of 2010 Farm-to-School & School Gardens Report

Reporting Period July 2014 – July 2015

Hanseul Kang
State Superintendent of Education
Office of the State Superintendent of Education

TABLE OF CONTENTS

SECTION 1: The District's farm-to-school initiatives and recommendations for improvement	3
SECTION 2: The District's school gardens, plans for expanding them, and recommendations for improvement	12
APPENDICES	
Appendix A Locally Grown and Unprocessed Tracking Log	25
Appendix B Farm Field Trip Grant Awardees, school year 2014-2015	26
Appendix C Food Corps Service Sites, Schools, and Service Members, school year 2014-2015	27
Appendix D List of Schools Participating in the USDA Farm-to-School Grant Harvest of the Month Program	28
Appendix E List of USDA Farm-to-School Grant Harvest of the Month Program Items Taste Tested and Grown in the Garden	
APPENDIX F Serving Up Local Poster	30
APPENDIX G Choose What's In Season Poster	31
Appendix H School Garden and Farm-to-School Advisory Committee Members, school year 2014-20	1532
Appendix I Garden Safety Checklist	34
Appendix J Strawberries & Salad Greens Day Registrants	35
Appendix K: Excerpt from the School Health Profile Form	36
Appendix L School Garden Assessment Tool	38
Appendix M Active School Garden List	45
Appendix N School Gardens Program Service Providers List, SY 2014-15	50
Appendix O Recommended Curricular Resources for School Gardens	54
Appendix P Outdoor Classroom Design Guide	57
Appendix Q School Garden Planting Calendar	61
Appendix R 2014 School Garden Grant Recipients	62
Appendix S 2015 School Garden Grant Recipients	63

As required by Sections 303 and 503 of the Healthy Schools Act of 2010 (HSA), DC Law 18-209, the District of Columbia Office of the State Superintendent of Education (OSSE) is pleased to report to the Council and the Healthy Youth and Schools Commission on:

- (1) The District's farm-to school initiatives and recommendations for improvement; and
- (2) The District's school gardens, plans for expanding them, and recommendations for improvement.

SECTION 1: The District's farm-to-school initiatives and recommendations for improvement



HSA Requirements - Local Food Sourcing

Under section 301 of the Healthy Schools Act (HSA), District of Columbia public schools and public charter schools shall serve locally-grown, locally-processed, and unprocessed produce from growers engaged in sustainable agricultural practices whenever possible. Preference shall be given to fresh, unprocessed agricultural products grown and processed in the District of Columbia, Maryland, and Virginia.

HSA Requirements - Education Programs, Technical Assistance, and Annual Celebrations

Under section 302 of HSA, OSSE, in conjunction with other District government agencies, community organizations, foodservice providers, public schools, and public charter schools shall develop programs to promote the benefits of purchasing and eating locally-grown and unprocessed foods that are from growers engaged in sustainable agricultural practices. In addition, OSSE is required to conduct at least one program per

year (such as an annual flavor of the week or a harvest of the month program) in collaboration with other District agencies and non-profit organizations.

Results: Compliance with Local Food Sourcing Requirements

Local Food Sourcing

OSSE monitors menu compliance with HSA as part of the U.S. Department of Agriculture's (USDA) Administrative Review process under the National School Lunch Program (NSLP). As in 2014-15 school year, LEAs are still required to report to OSSE on the local foods served as part of the school meals program using the "Locally-grown and Unprocessed Food Item Tracking Log" (Appendix A). Information reported includes the frequency with which local foods are served as part of the school breakfast or lunch meals, as well as the farm and the state of origin. This data is used to estimate pounds of each

specific local fruit or vegetable served across the District throughout the year. OSSE began collecting data using this method in February 2014 and data is collected quarterly. Data collected between February and June 2014 indicate that:

- The top five locally procured items (by weight) served as part of school meals are corn, apples, green beans, sweet potatoes, and greens.
- 75 percent of the produce (by weight) that is purchased locally comes from between 100 and 200 miles of the District of Columbia.



Results: Farm-to-School Education Programs, Technical Assistance, and Annual Celebrations

During the past school year, OSSE expanded opportunities for educating students about the benefits of eating local foods. The farm-to-school education programs and technical assistance that was offered to school staff, foodservice staff, foodservice vendors, and community partners during this reporting period is described below:

Farm-to-School Education Programs

• Farm Field Trip Grant: Farm field trips provide students with the opportunity to see where food is grown and to learn about plants, growing cycles, pollination, climate, and wildlife. The experience allows them to take the science and social studies concepts learned in the classroom and apply them in hands-on situations, while problem solving and answering questions about life on the farm. As many schools do not have the resources to send students on farm field trips,

¹ The serving size and calculations are derived from USDA Food Buying Guide for Child Nutrition Programs. Poundage is calculated as the product of servings per pound times the average number of meals claimed. Incomplete or incorrect data, such as produce reported as being supplied from a bakery or a farm that was unable to be verified as local, was removed.

OSSE created the Farm Field Trip grant and issued the first round of funding in SY 2014-15. Applicants are able to apply for up to \$1,500 each to cover the cost of transportation and the farm fee for one or more classes of students. In addition, grantees must apply at least 30 percent of the funds to purchasing materials such as curriculum and cooking equipment for follow-up activities in the classroom. Grantees are required to administer pre- and post-tests to measure student knowledge of and attitude towards the food system before the farm field trip, after the farm field trip, and after the follow-up activity. In SY 2014-15, OSSE awarded \$33,644 in Farm Field Trip Grants to 11 District of Columbia Public Schools (DCPS) and 12 public charter schools (PCS) from six different wards of the city (Appendix B). Through support from the Farm Field Trip Grants, 1,142 students participated field trips to local farms including Arcadia, Butler's Orchard, Common Good City Farm, Hard Bargain Farm, Kenilworth Aquatic Gardens, Muirkirk Farm, Rocklands Farm, and Washington Youth Garden. The Request for Applications (RFA) for the SY 2015-16 Farm Field Trip Grant was released May 22, 2015, and applications are due July 1, 2015.

Farm Field Trips for Teachers: In August 2014, OSSE partnered with the University of the District of Columbia (UDC) to take 41 teachers on two field trips to Muirkirk Farm (owned by UDC), in Beltsville, MD. There teachers had the opportunity to experience a farm field trip and to learn how to incorporate farm-to-school concepts into classroom lessons. Two evaluations were conducted after these trips via online tools, the first immediately following the trip and the second three months later. OSSE received 25 responses for the first evaluation and 12 responses for the three month follow up (Table 1). The first evaluation asked participants to respond on a scale of 1-5 to five questions, with 1 being "very untrue" and 5 being "very true." Respondents generally selected 4 or 5 on most questions. The one question that respondents found less true was "the information presented on the trip would have been easily understood by my students." As the trips were designed for adult learning, this illustrates to the need to discuss with teachers how the concepts could be adjusted for their particular grade levels. The three-month follow up evaluation asked respondents to answer "yes" or "no" to five questions regarding their activities with students and further investment in making farm-to-school concepts a part of their lessons. The results of this survey indicate the need for further followup after the field trip to ensure that teachers are comfortable incorporating farm-to-school concepts into their classrooms.

Table 1: Responses to Teacher Questionnaires Immediately After and
Three Months After a Farm Field Trip

Immediately after the trip						
Questions	1 "very unt	rue"	2	3	4	5 "very true"
This trip was beneficial to me as an educator or individual who works with students.	0		0	2	12	11
The information presented on the trip was easily understood.	0		0	2	8	15
The information presented on the trip would have been easily understood by my students.	0		6	10	3	6
I would recommend this trip to a colleague.	0		0	2	7	16
I am motivated to include farm-to-school messaging in my classroom.	0		0	0	11	14
Three mo	onths after	the tr	ip			
Questions			Yes			No
I've included farm-to-school ideas or full lesson classroom because of what I learned on the fiel	•		9			3
I've scheduled a farm field trip for my students since my visit to Muirkirk Farm.			4			8
If no, do you plan on scheduling a trip during the remainder of the school year?			6			4
Because of my visit to Muirkirk Farm, I plan on applying for the next Farm Field Trip Grant through OSSE.			8			4
I've completed my farm-to-school pledge from the day of the trip.			8 4			4

• FoodCorps: FoodCorps is a nationwide team of AmeriCorps leaders who connect kids to real food through school-based farm-to-school and school garden education programming. FoodCorps works solely in public schools with free- and reduced-meal percentages of 50 percent or higher. During the inaugural year of FoodCorps in the District of Columbia, 13 FoodCorps service members worked in 17 DCPS and PCS, either directly or through cooperative agreements between OSSE and eight community-based organizations (CBOs) (Appendix C). In addition, a FoodCorps fellow directly supervised by OSSE staff coordinated the work of the service members across the District. OSSE also provided a wide variety of training, as well as materials to the FoodCorps service members to assist them in providing high quality education in DC schools, including curriculum resources, garden tools, office supplies, and cooking kits. The items purchased will remain with OSSE or the FoodCorps service sites to be used by future FoodCorps service members.

Between September of 2014 and May of 2015, FoodCorps Service members provided 1,300 hours of classroom instruction and 1000 hours of garden instruction, and harvested 845 pounds

of produce from the District's school gardens.² The District will continue to serve as a host site for FoodCorps in SY 2015-16.

USDA Farm-to-School Support Service Grant: In December of 2013, OSSE was awarded a \$100,000 USDA Farm-to-School Support Service Grant to implement a comprehensive Harvest of the Month (HOM) program in 15 schools (Appendix D) throughout the District. Between November of 2014 and May of 2015, a different seasonal fruit or vegetable was featured as the monthly HOM item (Appendix E) in schoolwide cafeteria taste tests and students were asked to vote on whether or not they liked the item. Each HOM item was grown in the school garden, and students had the opportunity to learn about and/or harvest the item during that month. The HOM taste tests culminated with a tasting of strawberries and salad greens in conjunction with Strawberries & Salad Greens Day on May 20, 2015 (described on page 8). In addition to the taste tests and garden activities, the HOM Program included trainings for teachers and garden coordinators on how to better incorporate farm-to school-based education into their daily lessons. Approximately 5,300 students participated in the HOM Program. Local produce for the HOM taste tests was purchased from Miller Farms, a family-owned and operated farm located in Clinton, Maryland. In addition, each school participating in the HOM program received a visit from the Arcadia Mobile Market in either the fall of 2014 or the spring of 2015 and teachers from HOM schools will be taken on farm field trips to Arcadia in August of 2015. American University is compiling the results of the taste test voting and other evaluative components of the program and will provide a final report to OSSE in the summer of 2015. OSSE will then provide a final report on the grant to USDA and post the final report on the OSSE website.

Technical Assistance

- Serving Up Local Poster (Appendix F): This poster continued to be available for schools and food service vendors to place in school cafeterias. It is designed to assist foodservice staff with communicating messages to students about local foods being served as part of the school meals. The top right and bottom left hand corners of the poster are blank when printed allowing schools the option to write in the local items and the farm from which they originated. The poster is designed to be changed monthly, but a school is able to change it as often as they wish. OSSE works with local foodservice vendors to assist schools in identifying the local items being served, allowing the poster to be updated regularly.
- Choose What's in Season Poster (Appendix G): This poster was distributed during school year 2014-2015 and is a tool for teachers and foodservice staff to teach students about the seasonality of foods. The poster shows which local foods are in season throughout the year and encourages students to choose seasonal fruits and vegetables for meals and snacks. It was also distributed as part of the materials for Strawberries & Salad Greens Day (described on page 8).
- School Garden and Farm-to-School Advisory Committee (Appendix H): During SY 2014-15, the School Garden and Farm-to-School Advisory Committees were combined into one Committee.

² America Learns FoodCorps Data. https://americalearns.net/index.cfm?event=program.home&programpath=foodcorps

The Committee meets quarterly to provide feedback and guidance that directs the work of OSSE's School Gardens and Farm-to-School Programs. The Committee is made up of representatives from CBOs, foodservice vendors, and schools.

Garden Safety Checklist (Appendix I): OSSE developed a Garden Safety Checklist in partnership
with the District Departments of the Environment (DDOE) and Health (DOH). The checklist
provides best practices to guide schools in safely conducting cooking demonstrations and taste
tests with garden produce. A Garden Safety Training was provided via webinar and the checklist
was also reviewed as part of the Growing Garden Teachers Training Program (described on page
19). The checklist is available on the OSSE website and is provided to all School Garden grantees.

Annual Celebrations

 Growing Healthy Schools Week: The 4th annual Growing Healthy Schools Week took place from September 27 through October 3, 2014. The week included a wide variety of activities designed to reinforce school garden and farm-to-school concepts throughout the District. A kickoff event was held on September 29, 2014, at Thurgood Marshall Academy Public Charter School, which included physical activity for students and a "Top Chef" competition for chefs from three of the vendors that provide school meals across the city.

Details of the week are described below:

- 59 schools participated;
- o 5 chefs provided cooking demonstrations in schools;
- o 11 farmers made visits to schools;
- 40 athletes made visits to schools;
- 20 dietitians made visits to schools;
- A school garden bike tour showcased three school gardens;
- More than 50 people participated in a 5K fun run;
- o 49 schools participated in the scoreboard challenge; and
- Best School Garden Awards were given to School Within School, Barnard Elementary School, Stoddert Elementary School, and Sousa Middle School.
- Strawberries & Salad Greens Day: This annual celebration exposes students throughout the District to the messages of eating local produce and consuming more fruits and vegetables through tasting a locally-grown fruit and vegetable along with their peers across the city. This year, the event took place on May 20, 2015.

The educational resources provided to LEAs from OSSE included classroom lesson plans, tools for visits to school gardens, sample morning announcements, and ideas for education stations during lunch and at pick-up and drop-off times. OSSE strategically coordinated the framework of the day by providing lettuce plants, stickers, aprons, and talking points, and distributing OSSE's "Choose What's in Season" posters to all participating schools. OSSE also provided volunteers to 24 schools across the city that requested additional support. Volunteers were given a t-shirt provided through a generous donation from Kaiser Permanente Thriving Schools Program, as well as a Healthy Schools Act tote bag, provided by OSSE, to thank them for their efforts. OSSE also collaborated with by six CBOs including DC Hunger Solutions, Why Food Works, Arcadia

Center for Sustainable Development, Kid Power, EDGY Roots, and Washington Youth Garden to support school-based activities.

This year, the highlight of the day was a special celebration that took place at Burroughs Education Campus, during which the Mayor, Deputy Mayor of Education, and Superintendent had the opportunity to participate in taste testing strawberries and salad greens with 4th and 5th grade students. The event, emceed by Spike Mendelsohn, Chair of the DC Food Policy Council, drew attendees from schools, CBOs, City Council, the State Board of Education, and the U.S. Department of Education.

Data on the day is provided below (Table 2). Schools are given the opportunity to sign up for Strawberries & Salad Greens Day using an online form. 53 schools signed up and 50 indicated that they would conduct educational activities; however six of our HOM schools did not complete the online form so we believe that there are actually 56 schools that conducted educational activities (Appendix J). Based upon the form mentioned above, and conversations with foodservice vendors, 187 schools served local strawberries and salad greens as part of school lunch to celebrate the day.



Recommendations for Improvement/Plans for Expanding the District's Farm-to-School Initiatives

Updates on Areas for Improvement as Reported in the 2013-2014 Farm-to-School Report:

See below for specific action taken in 2014-15 school year for each of the seven recommendations in the 2013-14 school year Farm-to-School Report:

- 1. Increase the number of students participating in farm field trips by providing resources and assistance to teachers on curriculum integration, funding opportunities, and strategic partnerships with local area farmers and community organizations.
 - OSSE awarded the first round of Farm Field Trip Grant funding and issued an RFA for the second round of funding. OSSE provided grantees with a list of recommended field trip sites, as well as curriculum to help integrate the lessons learned on the trip into classroom activities.
- 2. Oversee the Farm Field Trip grantees and ensure that all requirements of the grant are met.
 - OSSE transitioned the grantees into the new Enterprise Grants Management System and provided technical support to schools in need of assistance during this process. The Enterprise Grants Management System (EGMS) is a system designed to improve the District of Columbia's management of Federal and Local grants administered by the Office of the State Superintendent of Education (OSSE). The system was designed to improve the management and administrations of grants and was established to provide users with information on the status of project applications and awards of Federal and State funds. OSSE also assisted grantees in locating farms for field trips and provided curriculum materials for follow-up activities. Schools continue to submit evaluations and trip summaries as final activities are implemented. OSSE plans to use this data to determine the impact of farm field trips on students and teachers and improve upon technical assistance provided to the grantees in future years.
- 3. Manage the implementation of the USDA Farm-to-School Grant through the use of FoodCorps service members and assess the success of program implementation.
 - OSSE, in partnership with FoodCorps, Arcadia, and American University, successfully
 implemented the HOM Program at 15 schools across the District. Various measures
 were used to assess the success of the program and American University will submit an
 evaluation report to OSSE in the summer of 2015.
- 4. Oversee the FoodCorps fellow and service members to ensure effective implementation of FoodCorps across the District.
 - OSSE directly supervised the work of a FoodCorps fellow and 13 service members supported 17 schools across the city during SY 2014-15. The District will continue as a host site for FoodCorps for SY 2015-16.
- 5. Focus the marketing efforts of the Farm-to-School program to promote local foods served in school meals through cafeteria signage and social media venues.
 - Through the implementation of the HOM program, participating schools received
 monthly posters and table tents that focused on the fruit or vegetable of the month.
 These materials will be available for schools and food service vendors to order free of
 charge in the coming school year. The Serving Up Local and Choose What's In Season
 posters continued to be distributed to schools in SY 2014-15.

- 6. Continue to work on a comprehensive tracking system for collecting data on local foods served in schools.
 - LEAs have continued to submit the Locally Grown and Unprocessed Food Item Tracking Log (Appendix A) and OSSE has collected data for the months ranging from August 2014 through April 2015 during this reporting period. Data is currently being entered and reviewed, with an expected completion date of July 2015.
- 7. Organize farm field trips for teachers in conjunction with the University of the District of Columbia.
 - 41 teachers from the District attended one of two field trips to Muirkirk Farm, operated by the University of the District of Columbia. Teachers spent the morning touring the farm and learning about a variety of agricultural practices and how to incorporate farmto-school concepts into their classrooms.
- 8. Finalize the Garden Safety Checklist.
 - This checklist has been finalized (see Appendix I), but is considered a working document and will be continuously updated.

During the 2014-15 school year, OSSE's Farm-to-School Program plans to:

- Complete all activities associated with the USDA Farm-to-School Support Service Grant, to include taking teachers from HOM participating schools on summer farm field trips, and assisting with the writing of the final report for USDA.
- Further align the Farm-to-School and School Gardens programs to deepen the connections between the cafeteria, the classroom, and the school garden.
- Continue to manage the Farm Field Trip Grant program, and expand the number of agricultural institutions providing educational activities to students in DC.
- Continue to support FoodCorps in DC including providing the FoodCorps fellow with institutional support.
- Collaborate with the School Gardens Program to expand Growing Healthy Schools Week to Growing Healthy Schools Month and continue to support schools in the implementation of Strawberries & Salad Greens Day.
- Continue to track local procurement data and assist schools in procuring and serving more local foods as part of school meals.
- Expand opportunities to provide teachers with professional development around incorporating farm-to-school concepts into classroom activities.
- Collaborate with OSSE's new Environmental Literacy Program to develop programming to integrate environmental literacy concepts into farm-to-school programming.

SECTION 2: The District's school gardens, plans for expanding them, and recommendations for improvement

HSA Requirements - School Gardens Program

Under section 503 of HSA, OSSE is to establish a School Gardens Program which shall:

- Coordinate the efforts of community organizations and District agencies, as well as the District
 of Columbia Public Schools and the Public Charter School Board to establish gardens as integral
 components of public schools and public charter schools;
- Establish and convene a Garden Advisory Committee composed of community organizations, District government agencies, and other interested persons;
- Collect data on the location and types of school gardens;
- Provide horticultural guidance and technical assistance to schools;
- Coordinate curricula for school gardens and related projects;
- Provide training, support, and assistance to school gardens;
- Assist schools in receiving certification as U.S. Department of Education Green Ribbon Schools;
- Work with the University of the District of Columbia to provide technical expertise, curricula, and soil testing for schools gardens; and
- Establish a demonstration compost pile when feasible.

HSA Requirements - School Garden Grants

Under section 102 of HSA, OSSE shall make grants available to support school gardens through a competitive process to schools and other organizations.

Results – Compliance with HSA School Gardens Program Requirements

Coordinate Efforts of Community Organizations and District Agencies to Establish Gardens as an Integral Component of the Schools

OSSE coordinates the efforts of community organizations and District agencies towards the goal of establishing school gardens as an integral component of the schools. These efforts are apparent in the activities described below.

Establish a School Garden Advisory Committee

During SY 2014-15, the School Garden and Farm-to-School Advisory Committees were combined into one Committee (Appendix H). This decision was made because of the similarities in composition between committees and to foster collaborating between School Garden and Farm-to-School programs. The Committee meets quarterly to provide feedback and guidance that directs the work of OSSE's School Garden and Farm-to-School programs. The Committee is made up of representatives from CBOs, foodservice vendors, District government agencies, and schools.

Collect Data on Location and Types of School Gardens

For the first time in 2014, OSSE added the collection of data on school gardens to the School Health Profiles (SHP) Questionnaire³, which each public school and public charter school within the District of Columbia is required to complete and submit to OSSE pursuant to Section 602 of the *Healthy Schools Act of 2010*. The information collected in the SHP serves as a comprehensive means of monitoring and evaluating schools on how well they are meeting the requirements under the HSA. All data in the SHP are self-reported by each school. The SHP data, along with other data sources including the School Garden Assessment Tool provided in Appendix L), site visits to 43 schools, and data from partner organizations, provides a broad picture of the School Garden activities in schools.

Using the multiple data collection methods described above, OSSE has determined that there are currently a total of 103 campuses with active school gardens. Sixteen new school gardens were established between July of 2014 and June of 2015 and 20 school gardens are no longer being maintained. Of the 20 that are no longer maintained, six were due to school closures.

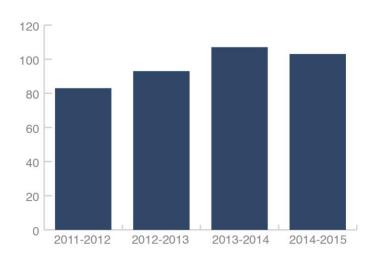


Figure 1. Number of School Gardens by Year school year 2011-2012 through 2014-2015

Although all 212 campuses in the District completed the SHP Questionnaire in 2014, only 86 of the 212 school campuses (40.5 percent) properly reported on their SHP that they had a school garden⁴. Based on

³ Last year, OSSE asked schools to complete a web-based School Garden Snapshot to collect data around the District's School Gardens. To streamline data collections, OSSE has decided to fully transition data collection around school gardens to the SHP Questionnaire and is no longer using the School Garden Snapshot. The School Garden section of the SHP is in Appendix K and the complete SHP Questionnaire is available here: http://osse.dc.gov/sites/default/files/dc/sites/osse/publication/attachments/School%20Health%20Profile 2015 f or%20distribution.pdf.

⁴ Of the 103 school gardens identified through the multiple data collection methods, 10 are not required to complete the SHP as they are private schools, seven schools provided incorrect data regarding the school garden, and 86 schools confirmed the existence of their school garden through the SHP.

other sources (e.g., x and Y), OSSE believes 103 campuses currently have active school gardens. Given this discrepancy, OSSE plans to provide technical assistance to schools to complete the SHP survey.

Of the 86 schools that self-reported having a school garden in the SHP questionnaire in 2014-15 school year, 52 were DCPS and 34 were PCS. School gardens are located across all eight wards, and more than 12,800 students received garden-based instruction during SY 2014-15. The majority of school gardens are utilized by students in grades kindergarten to grade five (Figure 2).

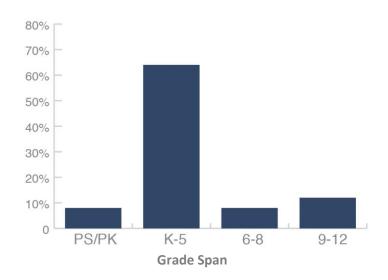


Figure 2. Percent of School Type with a School Garden, SY 2014-2015

School gardens are utilized before, during, and after the school day; however, most garden activity occurs during the school day. The topics most frequently taught in the school garden include nutrition and the environment, but the gardens are also used to teach science, technology, engineering, and mathematics (STEM) concepts, English, and art. There are a variety of types of school gardens in the District, with the most common being edible gardens, followed by pollinator gardens (Figure 3), and most school gardens contain multiple garden types. Each of these types of gardens is described below:

- <u>Edible Gardens</u>: include raised and in-ground beds growing a wide range of edible seasonal crops
- Pollinator Gardens: include plants that attract pollinators such as butterflies and bees
- <u>Storm Water Gardens</u>: include features that capture rainwater such as rain barrels, rain gardens, ponds, and replacing impermeable surfaces with permeable surfaces
- Native and Wildlife Gardens: include plants that are native to the DC area and include features that attract wildlife such as forests, birdhouses, bat houses, and bug houses
- <u>Greenhouses</u>: include enclosed spaces that allow for year-round growing and educational activities

80 70 60 50 40 30 20 10 0 Edible Stormwater Pollinator Native & Wildlife Greenhouses Other Garden Garden Garden Garden

Figure 3. Number of School Gardens by Type, SY 2014-15

To date, 54 (62 percent) of school gardens have a designated school garden coordinator who ensures that garden-based learning is an integral component of the school environment by overseeing garden programing, instruction, and maintenance. A school garden coordinator promotes the success of a school garden and serves as the main point of contact for the school garden. Budgets and size of gardens vary across the District, with schools reporting an average annual budget of \$9,755 for their gardens, which includes the school garden coordinator salary, and the average school garden size of 1,570 square feet.



Provide Horticultural Guidance and Technical Assistance

The School Garden Assessment Tool (Appendix L) is the primary tool for collecting data about the impact of the School Gardens Program and the functionality of individual school gardens who are recipients of the School Garden Grant. The data collected are used to communicate best practices, determine the greatest areas of need, and to ensure that relevant training and meaningful technical assistance is provided. The tool assesses school gardens based upon four categories: design, systems, program organization, and instruction. Based upon data collected from 25 school garden assessments, in SY 2014-15, instruction continues to be the area that grantees need additional support (Figure 4).

As evident in Table 3, which breaks down each component into multiple indicators, OSSE recognizes that there was an overall decline in the average scores for all four components School Garden Assessment Tool. OSSE attributes the lower average scores in each the four components of the to the rise in the number of *new* school garden grantees that may have less developed gardens or less experienced school garden coordinators. In 2013-2014, there were 21 School Garden Grantees and only two were new. However, in 2014-2015, there were 26 School Garden Grantees and seven were new.



Table 3. Average School Garden Assessment Tool Scores (%) by Category and Indicator, SY 2012-13 through SY 2014-15

CATEGORY	INDICATOR	SY12-13	SY13-14	SY14-15
Design	Overall	74%	89%	70%
	Circulation	65%	65%	61%
	Seating	65%	67%	54%
	Signage	46%	67%	57%
	Meeting Area	72%	78%	66%
	Tool Storage	84%	79%	72%
	Security Features	83%	98%	85%
	Accessibility	87%	94%	77%
Systems	Overall	72%	81%	65%
	Soil	67%	92%	68%
	Biologic	75%	88%	74%
	Pest & Disease Management	75%	91%	81%
	Wildlife	74%	77%	63%
	Water	71%	88%	73%
	Compost	51%	62%	44%
	Community Participation	53%	75%	59%
Program Organization	Overall	72%	80%	71%
	Vision Statement	65%	74%	66%
	Funding	69%	76%	70%
	Institutional Support	84%	85%	80%
	Garden Coordinator	73%	94%	89%
	Garden Committee	40%	78%	65%
	Student Involvement	71%	63%	50%
	Maintenance Plan	69%	85%	67%
Instruction	Overall	59%	70%	63%
	Curriculum & Instruction	54%	73%	67%
	Teacher Involvement	44%	62%	60%
	Student Impact	69%	75%	62%

Schools and organizations are able to request horticultural guidance and technical assistance from OSSE. OSSE responds to these requests and works closely with the school garden contacts to ensure support is provided either directly, or through partner organizations. During SY 2014-15, 43 technical assistance requests were received, all of which were addressed. The most frequent technical assistance requests in SY 2014-15 related to teacher involvement and curriculum and instruction.

Finally, OSSE maintains and continually updates a list of school gardens program service providers (Appendix N) from across the District and makes this list available to schools s. Many of these providers partner with schools on the OSSE School Garden Grants (described on page 20) and provide other school garden funding and services.

Coordinate Curricula for School Gardens and Related Projects

OSSE is involved in several efforts to support integration of school gardens into day-to-day instruction. These activities are described below:

- Recommended Curriculum Resources for School Gardens (Appendix O): OSSE regularly reviews
 and compiles information on garden-based curricula that can be utilized in grades
 prekindergarten through grade 12. These tools provide teachers with the resources to support
 integration of school garden concepts across all subject areas. These resources are available to
 teachers on the School Gardens Program website at http://osse.dc.gov/publication/dc-schoolgarden-based-curriculum-recommendations.
- Sustainable DC Innovation Challenge Outdoor Classroom: OSSE, in partnership with the
 Department of General Services and DCPS, was awarded \$330,000 through the Sustainable DC
 Innovation Challenge in February of 2014 to build one outdoor classroom. Subsequently, an
 additional \$330,000 of Healthy Schools Act funding and \$330,000 of Department of General
 Services operating funds were allocated allowing for an increase in the scope of the project to
 include three outdoor classroom. The outdoor classrooms will be located at Hardy Middle
 School (Ward 2), Tubman Elementary School (Ward 1) and Leckie Elementary School (Ward 8).
 These outdoor classrooms are expected to launch in 2015-16 school year and will provide
 opportunities for students to learn about renewable energy, storm water management, native
 planting, nutrition, and sustainable agriculture.
- OSSE Outdoor Classroom Design Guide (Appendix P): In November of 2014 the OSSE Outdoor Classroom Design Guide was completed in partnership with Department of General Services.
 This guide will inform the construction of future outdoor classrooms across the District.
- School Garden Bike Tours: In partnership with BicycleSPACE and Slow Food DC, OSSE sponsored two school garden bike tours that raised a total of \$400 to support two school gardens at Marie Reed Educational Campus and J.O. Wilson Elementary School. These bike tours brought more than 70 participants to eight school gardens where the SGCs shared information on their programs and facilitated garden tours.

Provide Training, Support, and Assistance to School Gardens

During the past school year, numerous professional development opportunities, supporting documents, and other mechanisms to assist school garden programs were provided to address the needs of school garden coordinators, community members, and school staff. These activities are described below:

- School Gardens 101: This annual training was offered again in SY 2014-15 and provided an
 overview of school gardens and the services offered by the School Gardens Program. It
 introduced school gardeners to the steps in developing a successful school garden and to
 organizations and agencies that can support school gardens through funding, materials, or
 technical assistance. Resources are also available online: http://osse.dc.gov/service/resources-school-garden-coordinators.
- Garden Safety Webinar: OSSE developed a Garden Safety Checklist (Appendix I) in partnership
 with District Department of Environment and Department of Health. The checklist provides best
 practices that can be used to guide schools in safely conducting cooking demonstrations and
 taste tests with garden produce. OSSE reviewed the checklist with educators during a garden

safety training webinar and as part of the Growing Garden Teachers Training Program. The checklist is available in Appendix I and on the OSSE website: http://osse.dc.gov/publication/checklist-starting-school-garden.

- Growing Garden Teachers Training Program: DC Greens, in collaboration with OSSE, administers
 the Growing Garden Teachers Training Program). This is a year-long course including four fullday sessions. OSSE School Garden grantees are required to attend these four trainings. Over 40
 SGCs participated in the Growing Garden Teachers Training Program during SY 2014-15.
- School Garden Planting Calendar (Appendix Q): OSSE developed a school garden planting
 calendar which provides information on the best items to plant in school gardens throughout
 the school year. The planting calendar was printed poster-sized and laminated so that SGCs
 could hang it in or near the garden, and make notes of planting dates and other pertinent
 information. The school garden planting calendar was distributed to all HOM school and all
 School Garden grantees, and is being distributed on an ongoing basis to other schools with
 gardens.
- Supplies and Materials: OSSE often purchases or arranges for the donation of materials that are distributed to school gardens to assist in their success. Materials provided during SY 2014-15 are included:
 - The DC Water BioSolids Program delivered high quality compost to school gardens free of charge. To date, 22 schools have received nearly 18 tons (nearly 50 cubic yards) of material.
 - C&D Tree Services provided wood waste (e.g., mulch, tree stumps, logs, and tables) to school gardens.
 - 150 bags of compost and 20 bags of plant food were distributed as part of the Growing Garden Teachers Training by OSSE.
 - 150 seed packets, 200 asparagus root stocks, and 2,000 strawberry root stocks were distributed through the HOM Program by OSSE.
 - o 15 cedar-raised beds were distributed to schools through the HOM Program by OSSE.

Additional Support

 School Garden Photo Database: OSSE maintains a photo database from observations of school gardens on the website at https://www.flickr.com/photos/dcschoolgardens/.

Assist Schools in Receiving Certification as U.S. Department of Education Green Ribbon Schools

During SY 2014-15, OSSE worked with District Department of Environment and Department of General Services to develop the District's application for the U.S. Department of Education Green Ribbon Schools award and conducted workshops and webinars for LEAs on applying for the award. George Washington University was the only school to submit an application and was selected as a U.S. Department of Education 2015 Green Ribbon Schools Postsecondary Sustainability Awardee in April of 2015.

Work with UDC to Provide Technical Expertise, Curricula, and Soil Testing for School Gardens

If school garden produce is to be consumed by students, the garden soil must be tested using laboratories recommended by OSSE. OSSE works with schools to ensure that the procedures regarding serving garden produce to students are clearly understood and followed and refers school garden programs to UDC for soil testing. This is further described in the Garden Safety Checklist (Appendix I) and in the Garden Safety Training webinar.

Establish a Demonstration Compost Pile

During SY 2014-15, 32 percent of schools composted onsite. Department of General Services, OSSE, and ECO City Farms completed the multi-year construction of demonstration compost piles at school gardens in all eight wards with the construction of a composting pile at Leckie Elementary School (Ward 8) in school year 2014-2015. In addition, DGS incorporated organics recycling into the standard DCPS Recycles! program, beginning with 54 schools. These schools began receiving organics hauling services and received assistance in setting up their kitchens and cafeterias for organics recycling. Together these schools sent more than 100 tons of organic waste to a composting facility instead of a landfill or incinerator. This program will continue to be phased in to all DCPS schools during school year 2015-2016.

Results – Compliance with School Garden Grants

OSSE's School Garden Grant ties together the garden, the cafeteria, and the classroom. Schools may apply for up to \$15,000, with the majority of the funding earmarked to support a school garden grant to oversee the garden and ensure that garden-based learning is incorporated into the school day. Each grantee's project is monitored and evaluated through at least two site visits during which a school garden assessment (Appendix L) and an SGC observation are conducted. In addition, the grantees must submit mid-project and an end-of-project reports that include pre- and post- student and teacher data, observations from the SGC and administration, and evidence of student participation in garden activities. Grantees use garden logs to track class-time and after-school use. Technical support is provided to grantees to ensure projects are successfully implemented. Schools are eligible to receive the SGG for three years out of a five-year period and OSSE works closely with schools to ensure that the garden is integrated into the school culture and that there is a plan in place to sustain the garden without OSSE funds.

During the 2014 grant cycle, OSSE awarded \$288,768 in SGGs to 21 schools (Appendix R). Data from the 2014 SGG grantees indicate:

- 4,700 students received 3,040 hours of garden-based instruction;
- 143 teachers used the garden to teach 824 lessons during the school day in nutrition, science, and mathematics; and
- 17 garden-based organizations provided technical support to grantees.

During the 2014-2015 grant cycle, grantees were provided with surveys to track attitude and behavior change among students and teachers as a result of participating in grant activities.

• 641 students from 21 schools responded to six questions on a three-point Likert scale with answers including "yes", "maybe", and "no". Student scores increased between the pre- and post-test on all of the items with the greatest change on the item "I eat things grown in the school garden" (Table 4).

Table 4. Percent of Students that Responded "Yes" to Pre-Test and Post-Test School Garden Grant Survey Questions, 2014

Student Survey	Pre	Post
I like eating vegetables	49%	55%
I help cooking food at home	40%	52%
I like spending time in the school garden	52%	65%
It is important that my school has a garden	66%	73%
I know how to take care of the garden	51%	64%
Learning how to garden is important	58%	69%
I eat things grown in the school garden	46%	68%
I like working with other students in the garden	54%	63%

• 185 teachers from 21 schools responded to six questions on a five-point Likert scale with answers ranging from "strongly agree" to "strongly disagree". Teacher scores increased between the pre- and the post-test on all items. The biggest changes in teacher responses were on the items "I use the garden to teach standards-based lessons" and "I feel confident teaching in the school garden" (Table 5).

Table 5. Percent of Teachers that Responded "Strongly Agree" and "Agree" to Pre-Test and Post-Test School Garden Grant Survey Questions, 2014

Teacher Survey	Pre	Post
I feel confident teaching in the school garden	54%	75%
I feel comfortable managing my class in the school garden	64%	80%
My students will benefit academically from garden-based instruction	92%	94%
Students are proud of the school garden	94%	96%
The school garden positively impacts my students food choices	51%	69%
I use the garden to teach standards-based lessons	45%	65%

- Feedback received from SGCs in the end-of-project reports indicated that:
 - All SGCs strongly agreed that the garden has had an overall positive impact on students;
 - All SGCs agreed or strongly agreed that students have gained knowledge through standardsbased lessons as a result of the garden program; and

• 86 percent of SGCs agreed or strongly agreed that the garden program has had an overall positive impact on teachers.

In December of 2014, OSSE solicited applications for the 2015 SGG. Grants were awarded to support 26 school gardens in both DCPS and PCS across all wards at a total of \$375,595 (Appendix S).

Recommendations for Improvement/Plans for Expanding the District's School Gardens Program

Updates on Areas for Improvement and Plans for Expanding School Gardens as Reported in the 2013-2014 School Gardens Report

During school year 2014-2015, the following items listed as areas for improvement and part of school garden expansion in the 2013-2014 Farm-to-School Report were accomplished accordingly:

- 1. Implement the Sustainable DC Outdoor Classroom Project in partnership with DGS;
 - The Sustainable Outdoor Classroom Project was expanded from one to now include three schools (Leckie Elementary School, Tubman Elementary School, and Hardy Middle School). Based upon a timeline provided by DGS, the classrooms will be completed by the start of SY 2015-16.
- 2. Oversee the FoodCorps Fellow and Service Members to ensure effective implementation of FoodCorps across the District;
 - OSSE directly supervised the work of a FoodCorps fellow and 13 service members supported 17 schools across the city during SY 2014-15. The District will continue as a host site for FoodCorps for SY 2015-16.
- 3. Support the garden component of the USDA Farm-to-School Grant which includes assisting participating schools in planting and harvesting HOM items;
 - OSSE successfully implemented the HOM Program at 15 schools across the District.
 Each school was provided with materials and technical assistance to grow the HOM items in the school garden and to make connections between the garden, cafeteria, and classroom
- 4. Develop resources and trainings to assist School Garden Coordinators in increasing the number of teachers that use the school garden for instruction;
 - As a component of the Growing Garden Teachers Training, SGCs received multiple sessions around engaging teachers including how to convert classroom lesson plans into garden-based lesson plans and how to align academic standards to garden-based activities. Teacher engagement has also been a focus of discussion during site visits.
- 5. Provide support to schools interested in applying for the U.S. Department of Education Green Ribbon Schools Award;
 - OSSE worked with DDOE and DGS to develop the District's application for the USDE GRS award and conducted workshops and webinars for LEAs on applying for the award.
 George Washington University was the only school to submit an application and was selected as a Postsecondary Sustainability Awardee in April of 2015.
- 6. Continue to provide technical support to schools to ensure that all active gardens remain active;
 - Technical support was provided to all schools that requested it.
- 7. Continue to support School Garden Coordinators by providing training and technical assistance;

- SGCs were supported through numerous trainings and technical assistance visits as requested.
- 8. Explore and develop new innovative partnerships that will support existing school gardens and establish new school gardens;
 - OSSE established a partnership with the DC Water BioSolids Program which delivers high quality compost to school gardens free of charge.
- 9. Assist School Garden Coordinators in developing sustainability plans for their school gardens and speaking to their administrators about school garden sustainability; and
 - SGCs receive training and technical assistance from OSSE and CBOs including DC Greens (GGT Training). Training included many topics to increase the success of the school garden including matters of sustainability. OSSE continues to assist non-grantee schools with training and technical assistance and materials. OSSE is also following the schools that reached their three year maximum to see how the program is being sustained and collect information on how OSSE can best provide assistance. Lastly, OSSE partners with CBOs and other government agencies to provide school garden support to all schools.
- 10. Finalize the Garden Safety Checklist.
 - This checklist has been finalized (Appendix I), but is considered a working document.

During SY 2015-2016, OSSE's School Gardens Program plans to:

- Further align the School Gardens and Farm-to-School Programs to deepen the connections between the cafeteria, the classroom, and the school garden.
- Continue to support the Sustainable DC Outdoor Classroom Project.
- Continue to support FoodCorps DC including providing the FoodCorps fellow with institutional support.
- Continue to expand partnerships with organizations that can provide resources and technical assistance to school gardens.
- Continue to support SGG grantees and provide training and support to SGCs on integrating the school garden into the school culture and increasing the sustainability of school gardens.
- Collaborate with the Environmental Literacy Program to develop programming to integrate environmental literacy concepts into school garden programming.

Conclusion

OSSE will continue to implement and support the Farm-to-School and School Gardens Programs authorized by the Healthy Schools Act. With our many partners invested in improving the health and wellness of our students, we will continue to promote lifelong healthy eating habits.

Healthy Schools Act of 2010 Farm-to-School and School Gardens Report Reporting Period July 2014 - June 2015 APPENDICES

Appendix A Locally Grown and Unprocessed Tracking Log

Serving Date	Item	Farm Name	Street Address	City	State	Breakfast	Lunch
10/5/13	Apple	Turkey Knob Growers, Inc.	1234 Healthy Growers Lane	Dover	Deleware		Х

Appendix B Farm Field Trip Grant Awardees, school year 2014-2015

School Name	Туре	Ward	Farm Visiting	Award Amount
Bancroft Elementary School	DCPS	1	Washington Youth Garden & Common Good City Farm	\$1,500.00
Barnard Elementary School	DCPS	4	Arcadia	\$1,500.00
Capitol Hill Montessori @ Logan	DCPS	6	Rocklands	\$1,354.00
Columbia Heights Education Campus	DCPS	1	Arcadia	\$1,500.00
Creative Minds International PCS	PCS	1	Washington Youth Garden	\$985.00
DC Bilingual PCS	PCS	1	Hard Bargain	\$1,500.00
EL Haynes Elementary PCS	PCS	4	Common Good City Farm & Washington Youth Garden	\$1,180.00
EL Haynes High School PCS	PCS	4	Rocklands	\$790.00
Excel PCS	PCS	8	Arcadia	\$1,500.00
Ingenuity Prep_1 PCS	PCS	8	Arcadia	\$1,500.00
Ingenuity Prep_2 PCS	PCS	8	Rocklands	\$1,500.00
John Eaton Elementary School	DCPS	3	Arcadia	\$1,500.00
Lafayette Elementary School	DCPS	4	UDC	\$1,112.00
LAMB PCS	PCS	4	Rocklands & Common Good City Farm	\$1,500.00
LAYC Career Academy PCS	PCS	1	Washington Youth Garden & Common Good City Farm	\$1,500.00
Paul International PCS	PCS	4	Rocklands	\$1,400.00
Powell Elementary School	DCPS	4	Butler's Orchard	\$1,500.00
School Within a School	DCPS	6	Red Wiggler	\$1,500.00
Thurgood Marshall Academy PCS	PCS	8	Arcadia	\$1,500.00
Truesdell Elementary School	DCPS	4	Arcadia	\$1,500.00
Two Rivers PCS	PCS	6	Arcadia	\$1,500.00
Tyler Elementary School	DCPS	6	Arcadia	\$1,455.00
Washington Yu Ying PCS	PCS	5	Rocklands	\$1,368.00
Watkins Elementary School	DCPS	6	Arcadia	\$1,500.00

Appendix C Food Corps Service Sites, Schools, and Service Members, school year 2014-2015

Service Site	School
Capital Area Food Bank	Hart Middle School
	Leckie Elementary School
City Blossoms	Cleveland Elementary School
	Garrison Elementary School
	Eastern High School
	Randle Highlands Elementary School
DC Greens	Kimball Elementary School
	Walker Jones Education Campus
FRESHFARM Markets	Ludlow- Taylor Elementary School
	Tyler Elementary School
Marie Reed	Marie Reed Elementary School
Metz Culinary Management	Excel PCS
SEED School of Washington	SEED PCS
Washington Youth Garden	Burroughs Education Campus
	Center City PCS - Trinidad Campus
	Friendship PCS - Woodridge Elementary Campus
	KIPP DC PCS - Northeast Academy Campus

Appendix D List of Schools Participating in the USDA Farm-to-School Grant Harvest of the Month Program

School	Ward	Grades	Enrollment⁵
Burroughs Education Campus	5	PK-8	297
Center City PCS - Trinidad Campus	5	PK-8	218
Cleveland Elementary School	1	PK-5	308
Excel PCS	8	PK-5	595
Friendship PCS - Woodridge Elementary	5	PK-8	282
Campus			
Garrison Elementary School	2	PK-5	244
Hart Middle School	8	6-8	479
Kimball Elementary School	7	PK-5	348
KIPP DC PCS - Northeast Academy Campus	5	5-6	120
Leckie Elementary School	8	PK-5	478
Ludlow Taylor Elementary School	6	PK-5	340
Marie Reed Elementary School	1	PK-5	393
Randle Highlands Elementary School	7	PK-5	360
SEED PCS	7	6-12	315
Tyler Elementary School	6	PK-5	522
Approximate Total Enrollment			5,299

_

⁵ Enrollment Data obtained from DC Statewide Longitudinal Education Data System (SLED) as of February 5, 2015, based on the 2014-2015 Annual Student Enrollment Audit.

Appendix E List of USDA Farm-to-School Grant Harvest of the Month Program Items Taste Tested and Grown in the Garden

Month	HOM Item
November	Butternut Squash
December	Carrots
January	Cabbage
February	Kale
March	Sweet Potatoes
April	Asparagus and Peas
May	Strawberries and Salad Greens

APPENDIX F Serving Up Local Poster

The LOCAL

foods YOU can try during lunch this month in

CUCUMBERS

Look for them sliced into cucumber coins or chopped into pieces.

They can be found on their own or as part of a salad on your lunch tray!

RVINGUPLOCA The Healthy Schools Act Says

This month, schools are serving cucumbers from local growers like

Parker Farms

Oak Grove, Virginia

Hess Farm

Waynesboro, Pennsylvania

Pennsylvania, Delaware

Brought to you by the Office of the State Superintendent of Education's Farm to School Program

"LOCAL"

means anything grown

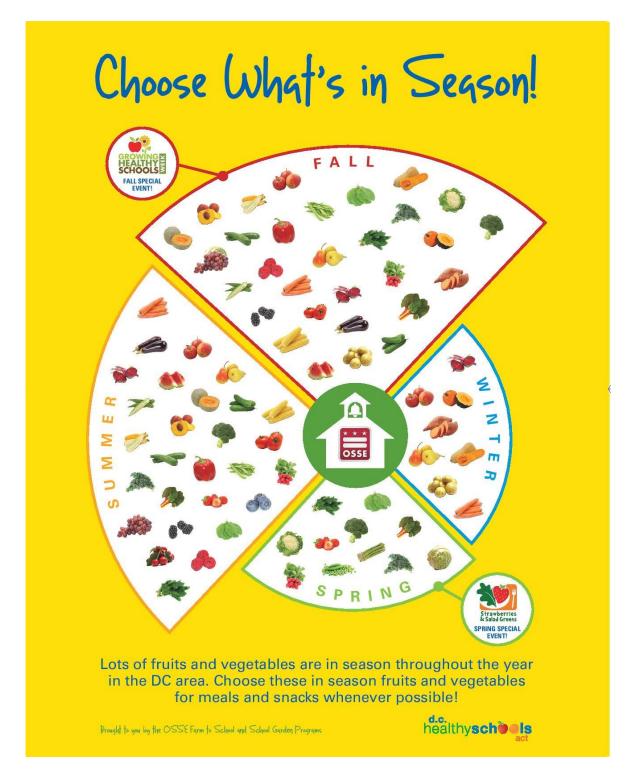
in DC, Maryland, Virginia, West Virginia,

North Carolina,

and New Jersey!

For more information, contact OSSE's Farm to School Specialist at (202) 262-0898

APPENDIX G Choose What's In Season Poster



Appendix H
School Garden and Farm-to-School Advisory Committee Members, school year 2014-2015

Last Name	First Name	Organization
Anderson	Kamili	DC State Board of Education
Anderson-Hall	Kaifa	Community Member
Arter	Jenella	Student (Banneker High School)
Biel	Lauren	DC Greens
Bloom	Lola	City Blossoms
Boyd	Susan	Community Member
Burke	Lisa	Parent (Murch Elementary School)
Carroll	Zawadi	Student (School Without Walls High School)
Davis	Rebecca	D.C. Environmental Education Coalition
Doan	Patricia	District Department of the Environment
Dobbs	Alex	Revolution Foods
Farber	Sandra	University of the District of Columbia
Foster	Shannon	Teacher (Payne Elementary School)
Gingold	Beth	Department of General Services
Harvey	Katie	Kid Power
Helgerson	Rebecca	School Garden Coordinator (Tubman Elementary School)
Holway	Sarah	DC Greens
Howe	Lea	DC Greens
Huvendick	Nancy	21st Century School Fund
Idrovo	Camila	DC Bilingual PCS
Katz	Nancy	Office of the State Superintendent of Education
Lee	Kate	DC Greens
Lemos	Rebecca	City Blossoms
Maloney	Morgan	Arcadia Center
Manubay	Grace	District Department of the Environment (now at OSSE)
McCarty	Jeanne	REAL School Gardens
McNerny	Tara	Mundo Verde PCS
Moore	Linda	Elsie Whitlow Stokes Community Freedom Academy
Moutoux	Maureen	Moutoux Orchards
Nash	Katie	DC Central Kitchen
Newman	Rebecca	District of Columbia Public Schools
Percival	Barbara	Watkins Elementary (FoodPrints Volunteer)
Prince	Bernie	FRESHFARM Markets
Reichel	Paula	Capital Area Food Bank

Last Name	First Name	Organization
Shuster	Sharona	Parent (Mundo Verde PCS)
Singer	Josh	Department of Parks and Recreation
Trahan	Ariel	Anacostia Watershed Society
Ullery	Sam	Office of the State Superintendent of Education
Vincent	Ibti	Slow Food DC
Walther	Erica	Office of the State Superintendent of Education
Wanta	Charla	Washington Youth Garden
Williams	Audrey	Public Charter School Board
Wobbekind	Kate	District of Columbia Public Schools Office of Food and Nutrition Services

Appendix I Garden Safety Checklist

	Item #	ITEMS	YES	NO	N/A
Site Selection	1	Obtain historical information of the planned/ existing garden site and test the soil for toxins such as arsenic and lead.			
	2	Site garden away from hazards such as garbage, water run-off, flood zones and utilities.			
	3	Contact "Miss Utility" (1-800-257-7777) before digging in the soil.			<u> </u>
Soil & Compost	4	Compost bins are well maintained and prevent pests.			
	5	Compost collection station is staffed and monitored by an adult or a trained student.			
	6	Only properly treated, commercially-prepared manure is used. Soil testing is done every three years.			
	7	Label instructions for soils, compost, and fertilizers are followed. Fertilizers are only applied by adults.			
Food Handling & Preparation	8	Containers used to transport harvested items are food-grade, properly cleaned, and in good condition.			
	9	Persons who are currently ill or are known to be contagious are prevented from working in the garden or handling any food.			
	10	All persons have access to restrooms (with potable hot running water/soap/paper towels).			
	11	Proper personal hygiene practices are in place. All persons wash hands before harvesting food for public.			
	12	USDA "Best Practices for Handling Fresh Produce in Schools" procedures are being followed for items destined for consumption.			
	13	Harvested items are labeled and properly stored prior to use in cafeteria or otherwise consumed.			
Water & Irrigation	14	Gray water, waste water, and/or runoff water from surfaces that may contain toxins is not used to water edibles or wash produce.			
	15	Rainwater is collected from a roof with appropriate roofing material and stored in a food grade container.			
	16	Storage tanks such as cisterns or rain barrels are properly cleaned and flushed.			
	17	Backflow prevention devices are installed as part of the irrigation system.			
Garden Design	18	Non-toxic, non-leaching materials are used for edible garden beds.			
	19	Clear signage is provided regarding proper garden procedures such as composting, hand washing, and tool use.			
	20	Only non-allergenic and non-toxic plants are used.			
Tools	21	Tools and utensils are properly cleaned and sanitized.			
	22	Tools are properly stored and locked. Tools not suited for children such as sharp tools should be out of reach and closely monitored.			
Animals and Pests	23	Integrated Pest Management policies and procedures are followed.			
	24	Hands are washed with soap and water after being in an animal area and going back into the produce production area.			
	25	Animals are humanely housed in an enclosed area down-slope from the produce production area and are kept out of growing areas at all times.			
	26	There is no evidence of abuse from domestic and/or wild animals.			
	27	Bees are placed in a low traffic section of the garden that receives excellent sunlight.			
Health	28	A well-stocked first aid kit is readily available in the garden.			
	29	All persons are wearing closed-toed shoes, and are encouraged to wear appropriate clothing to protect themselves from sun, cold, and heat.			

Appendix J Strawberries & Salad Greens Day Registrants

Amidon-Bowen Elementary School	Malcolm X Elementary School
Barnard Elementary School	KIPP DC PCS - Heights Academy
Bridges PCS	KIPP DC PCS – Northeast Campus
Browne Education Campus	Kimball Elementary School
Cardozo Education Campus	Leckie Elementary School
Center City PCS - Trinidad Campus	Mann Elementary School
Cesar Chavez PCS - Kenyon Street Campus	Marie Reed Elementary School
Cleveland Elementary School	Mary McLeod Bethune Day Academy PCS
Columbia Heights Education Campus	Miner Elementary School
Creative Minds International PCS	Mundo Verde PCS
Excel PCS	Payne Elementary School
Friendship PCS - Tech Prep Academy	Peabody Primary Campus
Garrison Elementary School	Perry School Community Services Center
Hardy Middle School	Randle Highlands Elementary School
Hart Middle School	Seaton Elementary School
H.D. Cooke Elementary School	Sousa Middle School
Hendley Elementary School	St. Coletta School
Hope Community PCS - Lamond Campus	St. Columba's Nursery School
Houston Elementary School	St. John's Community Services - Anacostia Campus
Howard University Middle School PCS	St. John's Community Services - Langley Elementary
Inspired Teaching PCS	Stoddert Elementary School
Janney Elementary School	SEED PCS
Jefferson Middle School Academy	Thurgood Marshall Academy PCS
J.O. Wilson Elementary School	Tree of Life Community PCS
John Burroughs Education Campus	Tubman Elementary School
John Eaton Elementary School	Tyler Elementary School
Kelly Miller Middle School	Washington Mathematics Science and Technology PCS
Ketcham Elementary School	Washington Yu Ying PCS
Ludlow-Taylor Elementary School	West Education Campus

Appendix K: Excerpt from the School Health Profile Form Section 8: School Gardens Questions 61-73

61. Does your schoo	l currently have a School Garder	1?*						
□ Yes □	No							
61a. Name of Garde	n Contact*							
61b. Garden Contact E-mail*								
62. How many uniqu	ue students participated in your	school garden program this year?						
63. In what year was	s this garden established?							
64. Which grades are	e most directly impacted by the	school garden program?						
☐ Pre-School	I							
□ K-5								
□ 6-8								
□ 9-12								
	roximate size of your garden in s	· ——						
☐ Edible Gar	den							
☐ Stormwate	er/Rain Garden							
☐ Pollinator/	Butterfly Garden							
☐ Wildlife Ha	abitat/Native Garden							
☐ Greenhous	se							
☐ Other:								
68. When do activiti	es happen in the school garden?	select all that apply						
☐ Classroom instruction (during the school day)								
□ Extracurrio	cular activities (outside the schoo	l day)						
☐ Lunch time	e activities							
☐ Summer ti	me							
69. What topic is mo	ost frequently taught in the scho	ol garden?						
☐ Nutrition	☐ Environment	□ STEM						
☐ English	☐ Math	□ Art						
□ Other:								

70. What is the estima	ted operating budget for your school garden?
•	rticipate in Growing Healthy Schools Week (September 27- October 3, 2014) or in Strawberries and Salad Greens Day (May 2015)?*
72. Does your school h	ave a school-wide recycling program?
□ Yes □ No	
	aterials does your school recycle (materials recycled/composted off site)? selec
all that apply	
□ Aluminum	
□ Cardboard	
□ Food waste	
□ Glass	
□ Paper	
□ Plastics	
□ None of the a	above
73. Does your school co	ompost on-site? select all that apply
☐ Yes, outside o	on school grounds
Yes, inside in	classroom worm bins
☐ Yes, other me	ethod
□ No	

Appendix L School Garden Assessment Tool

	School Name:	Date:	Contact Name:	
Indicator	Exceeds	Working Towards	Does not Meet	Missing
Design				
Circulation	Walkways allow students to experience the garden through the use of all senses. The width, materials used, and placement of walkways should reflect the intended use. (5)(*)	Walkways allow students to experience the garden through the use of some senses OR the width, materials used, and placement of walkways somewhat reflects the intended use. (3)	Walkways allow students to experience the garden through the use of few senses AND/OR the width, materials used, and placement of walkways does not reflect the intended use. (1)	This component is missing. (0)
Seating	Seating is age- appropriate and is available for the expected number of students that will use the garden at one time. Seating is shaded, multi- purpose, and promotes reflection, observation, and conversation. (5)	Seating is somewhat age- appropriate OR is not available for the expected number of students that will use the garden at one time OR seating is not multi-purpose OR seating is not shaded OR seating does not promote reflection, observation, and conversation. (3)	Seating is not age- appropriate AND is one of the following: not available for the expected number of students that will use the garden at one time; not multi-purpose; not shaded; does not promote reflection, observation, and conversation. (1)	This component is missing. (0)
Signage	Signage is age- appropriate and student- centered. Bulletin board is a permanent, multi- use structure that is clearly visible and actively promotes vision, open hours, current happenings, maintenance tasks, contact information, and upcoming events. Bulletin board reflects the culture of the school garden. (5)	Signage is somewhat ageappropriate and student-centered. Bulletin board is either not a permanent OR multi-use structure OR it is not clearly visible OR it does not actively promote vision, open hours, current happenings, maintenance tasks, contact information, and/or upcoming events OR the bulletin board only somewhat reflects the culture of the school garden. (3)	Signage is not age- appropriate and/or student-centered. Bulletin board is either not a permanent OR multi-use structure OR it is not clearly visible OR it does not and actively promotes vision, open hours, current happenings, maintenance tasks, contact information, and/or upcoming events. AND the bulletin board does not reflect the culture of the school	This component is missing. (0)

			garden. (1)	
Meeting Area	The central meeting area is a multi-use space that supports the maximum number of students that will use the garden at one time. There is a white/chalkboard clearly visible. Class supplies such as notebooks, writing utensils, and teaching materials are easily accessible. Systems are in place for students to efficiently transition in and out of this space. (8)	The central meeting area is a somewhat multi-use space OR it does not support the maximum number of students that will use the garden at one time OR there is no white/chalkboard clearly visible OR class supplies such as notebooks, writing utensils, and teaching materials are not easily accessible OR systems are only somewhat in place for students to efficiently transition in and out of this space. (6)	The central meeting area is not a multi-use space OR it does not support the maximum number of students that will use the garden at one time. Two of the following are true: there is no white/chalkboard clearly visible OR class supplies such as notebooks, writing utensils, and teaching materials are not present OR systems are not in place for students to efficiently transition in and out of this space. (3)	This component is missing. (0)
Tool Storage	Tools storage is in a weather proof structure, is easily accessible, is well organized, and contains appropriate tools. Tools are organized for maximum efficiency and systems are in place to ensure for proper tool care and use. (8)	Tools storage is in a somewhat weather proof structure OR is not easily accessible OR is not well organized OR does not contain appropriate tools AND/OR tools are not organized for maximum efficiency OR systems are only somewhat in place to ensure for proper tool care and use. (6)	Tools storage is not in a weather proof structure OR is not easily accessible OR is not well organized OR does not contain appropriate tools AND tools are not organized for maximum efficiency OR systems are not in place to ensure for proper tool care and use. (3)	This component is missing. (0)
Security Features	Garden is highly visible from nearby public spaces. Tools are secured safely. No hazards are present. (10)	Garden is somewhat highly visible from nearby public spaces OR tools are not secured safely. No hazards are present. (7)	Garden is not highly visible from nearby public spaces AND tools are not secured safely OR hazards are present. (3)	This component is missing.

Accessibility	The garden is readily accessible to the target audience including those with disabilities. Regular open hours are maintained. (9)	The garden is somewhat accessible to the target audience OR those with disabilities do not have garden access OR regular open hours are not maintained. (7)	The garden is not accessible to the target audience AND/OR those with disabilities do not have garden access AND/OR regular open hours are not established. (4)	This component is missing. (0)
Systems				
Soil	Soil tests and observations show the soil has sufficient macro and micro nutrients, proper structure, and pH to meet plant needs. A detailed plan is in place to ensure that soil health is maintained. (10)	Soil tests and observations show the soil has insufficient macro and micro nutrients, proper structure, and/or pH to meet plant needs OR an under developed plan is in place to ensure that soil health is maintained. (7)	Soil tests and observations show the soil has severely insufficient macro and micro nutrients, proper structure, and/or pH to meet plant needs OR no plan is in place to ensure that soil health is maintained. (3)	This component is missing. (0)
Biologic	Plants are diverse and appropriate for the intended use of the garden resulting in high yields and vigorous growth. Planting areas are weeded/cared for regularly. Plants are properly sowed, maintained, and harvested. (10)	health is maintained. (7) are diverse and priate for the ed use of the resulting in high and vigorous heded/cared for rly. Plants are motoriate for the irregularly OR some plants are not properly sowed, health is maintained. (7) ens maintained. (7) for the intended use of for the garden resulting in moderate yields and growth OR planting areas are weeded/cared for irregularly OR some plants are not properly sowed, important in the maintained. (7)		This component is missing.
Pest and Disease Management	Plants are healthy and no serious pest or disease problem exists. An organic management plan is in place that effectively manages pests and diseases by first keeping pest away from plants (ex: row covers), then using biological controls (ex: attracting beneficial insects), and lastly using organic sprays and dusts (ex: neem oil). (10)	harvested. (7) Plants are somewhat healthy and no serious pest or disease problem exists OR an organic management plan is in place that somewhat effectively manages pests and diseases by first keeping pest away from plants (ex: row covers), then using biological controls (ex: attracting beneficial insects), and lastly using organic sprays and dusts (ex: neem oil).	harvested. (3) Plants are unhealthy and serious pest or disease problem exists OR an organic management plan is not in place. (3)	This component is missing. (0)

		(7)		
Wildlife	Wildlife is regularly spotted in the garden. It is a sanctuary for wildlife with pollinator plants, plants that attract beneficial insects, and homes for native birds. (10)	Wildlife is not regularly spotted in the garden, however attempts have been made to create a sanctuary for wildlife with pollinator plants, plants that attract beneficial insects, and homes for native birds. (7)	Wildlife is not regularly spotted in the garden AND no attempts have been made to create a sanctuary for wildlife. (3)	This component is missing.
Water	The garden employs an effective watering system that is appropriate for the scale, type, and purpose of the garden. Students are trained in proper watering techniques and are responsible for the watering. A plan is in place for watering over school breaks. (10)	The garden employs a somewhat effective watering system that is appropriate for the scale, type, and purpose of the garden OR students are somewhat trained in proper watering techniques and are responsible for the watering OR an ineffective plan is in place for watering over school breaks. (7)	The garden employs an ineffective watering system that is inappropriate for the scale, type, and purpose of the garden OR students are not trained in proper watering techniques OR no plan is in place for watering over school breaks. (3)	This component is missing. (0)
Compost	The garden has a well-designed, maintained, and effective compost system that produces high quality finished compost. The system minimizes rodent issues. The compost system is appropriate for the size and type of garden. Students are trained on proper composting methods and are responsible for composting. (10)	The garden has a somewhat well-designed, maintained, and effective compost system that produces finished compost. The system attempts to minimize rodent issues OR the compost system is somewhat appropriate for the size and type of garden OR students are not fully trained on proper composting methods AND\OR are not	The garden has a poorly designed, maintained, and ineffective compost system that produces little finished compost OR the system has rodent issues OR the compost system is inappropriate for the size and type of garden OR students are not trained on proper composting methods AND/OR are not responsible for	This component is missing. (0)

		responsible for composting. (7)	composting. (3)	
Community Participation	The program is highly effective in involving community members through regular, well-planned events. Communications are effective at reaching the community and are frequent and regular. (15)	The program is somewhat effective in involving community members through regular well-planned events OR communications are somewhat effective at reaching the community. (10)	The program is not effective in involving community members. Events are not regular AND/OR are not well-planned AND communications do not reach the community. (5)	This component is missing. (0)
Program Organization				
Vision Statement	A vision and mission exists and aligns with that of the school. (5)	A vision and mission exists and somewhat aligns with that of the school. (3)	A vision and mission does exist OR exists but does not align with that of the school. (1)	This component is missing.
Funding	A reliable funding source has been identified and the school's budget includes a line item for the school garden. The school regularly matches funds to support the garden program. (15)	A somewhat reliable funding source has been identified OR the school's budget does not include a line item for the school garden OR the school does not match funds to support the garden program. (10)	Funding source has not been identified AND the school's budget does not include a line item for the school garden AND the school does not match funds to support the garden program. (5)	This component is missing.
Institutional Support	The garden is well- supported from the top down. The garden is a part of the school's vision/mission. (15)	The garden is somewhat well-supported from the top down OR the garden is loosely a part of the school's vision/mission.	The garden is not supported from the school staff OR the garden is not a part of the school's vision/mission. (5)	This component is missing. (0)
Garden Coordinator	A highly skilled dedicated garden coordinator is responsible for the dayto-day operations of the school garden and record keeping. This person is compensated for this	A skilled garden coordinator is responsible for the day-to-day operations of the school garden and record keeping. This person is only sometimes	A garden coordinator is responsible for the day-to-day operations of the school garden and record keeping AND this person is unskilled OR is not compensated OR	This component is missing.

	time, receives training, and is supported by the school staff. (15)	compensated OR does not receive training OR is unsupported by the school staff. (10)	does not receive training OR is unsupported by the school staff. (5)	
Garden Committee	A garden committee is established that includes diverse representation that establishes and upholds the purpose, vision, and goals of the garden. (10)	A garden committee is established and includes somewhat diverse representation that establishes and upholds the purpose, vision, and goals of the garden. (7)	A garden committee is not established, is established but does not meet OR does not include diverse representation. (3)	This component is missing. (0)
Student Involvement	All students are involved in various aspects of the garden. (10)	Greater than 50% of the student body is involved in various aspects of the garden. (7)	Less than 50% of the student body is involved in various aspects of the garden. (3)	This component is missing. (0)
Maintenance Plan	A year-long maintenance plan is in place that clearly defines responsibilities, work assigned, and tasks. Regularly scheduled work days are productive and well-attended by the community. (15)	A year-long maintenance plan is in place that defines responsibilities, work assigned, and tasks OR work days are productive and well-attended by the community. (10)	A year-long maintenance plan that clearly defines responsibilities, work assigned, and tasks are not in place OR work days are irregular AND/OR workdays are not well-attended by the community. (5)	This component is missing.
Curriculum and Instruction	A standards-based garden curriculum is used to teach all garden lessons. Teachers use a wide range of instructional techniques in the garden. (25)	A standards-based garden curriculum is used to teach most garden lessons. Teachers do not use a wide range of instructional techniques in the garden. (17)	A standards-based garden curriculum is used to teach few garden lessons AND teachers do not use a wide range of instructional techniques in the garden. (10)	This component is missing. (0)
Teacher Involvement	Many teachers use the garden across subject areas. Professional development is available to all teachers and all teachers participate. The garden is used throughout the year. (25)	Some teachers use the garden across subject areas. Professional development is available to some teachers OR only some teachers participate OR the garden is not used throughout the entire year. (17)	Few teachers use the garden or teachers from only one subject area use the garden OR limited professional development is available OR the garden is used for a very short period throughout the	This component is missing.

		ram has an Iming positive	The program has a somewhat positive impact	year. (10) The program has a negative impact on	This component
Student Impact	attitudes	n students' s and or behavior surable way.	on students' attitudes and/or behavior in a measurable way OR the program has an overwhelming positive impact on student's attitudes and behavior but this impact is not measurable. (17)	students' attitudes. (10)	is missing. (0)
Improvement	Plan				
Goals	3				
Improvement Areas					
	Technical Support Needed				
		*Numbers repre points.	sent scoring points for each o	category. All rubrics are no	t worth equal

Appendix M Active School Garden List

School Name	New Garden	Grades directly impacted by the garden	Edible Garden	Stormwater/Rain Garden	Pollinator/Butterfly Garden	Wildlife Habitat/Native Garden	Greenhouse	Other
Ward 1 Schools		I			1		I	
Bancroft Elementary School		K-5	Х	Х	Х		Х	
Briya PCS~		K-5						
Bruce-Monroe Elementary School @ Park View		K-5	Х					
Chavez PCS - Prep Middle School Campus		None#						
Cleveland Elementary School		K-5	Х					
Columbia Heights Education Campus		9-12	Χ					
DC Bilingual PCS		K-5	Χ		Х		Х	
E L Haynes PCS - Georgia Avenue		K-5	Χ		Х			
H.D. Cooke Elementary School		K-5	Х		Х			
Marie Reed Elementary School		K-5	Χ		Х			
Tubman Elementary School		K-5	Х		Х			Х
Ward 2 Schools		1						
Community Academy PCS - Butler Bilingual Campus	Χ	K-5	Χ	Х			Χ	
Garrison Elementary School		K-5	Χ					
Hardy Middle School		6-8	Χ					
Hyde-Addison Elementary School		None#	Х		Х			
School Without Walls at Francis Stevens		K-5	Х		Х			
The British School of Washington*		6-8						
Thomson Elementary School		None						
Ward 3 Schools								
Community Preschool of the Palisades*		Pre-School						
Deal Middle School		6-8	Х					
Eaton Elementary School		K-5	Χ		Χ			

School Name	New Garden	Grades directly impacted by the garden	Edible Garden	Stormwater/Rain Garden	Pollinator/Butterfly Garden	Wildlife Habitat/Native Garden	Greenhouse	Other
Janney Elementary School		K-5	Х		Х			
Key Elementary School		K-5	Х	Х	Χ	Х	Х	
Mann Elementary School		K-5	Х	Х	Х		Х	Х
Maret School*		K-5						
Murch Elementary School		K-5	Х	Х	Х			
Oyster-Adams Bilingual School~		K-5						
Sidwell Friends*		9-12						
St. Columba's Nursery School*		Pre-School						
Stoddert Elementary School		9-12	Χ			Х		
Washington International School*		6-8						
Wilson High School		None#	Χ					
Ward 4 Schools								
Barnard Elementary School		K-5	Χ	Х			Х	
Bridges		Pre-School	Х					Χ
Brightwood Education Campus	Х	6-8						
Capital City PCS - High School	Х	9-12	Х	Х	Х			
Capital City PCS - Lower School		K-5	Х	Х	Х			
Capital City PCS - Middle School	Х	6-8	Х	Х	Х			
Coolidge Senior High School~		9-12						
E.L. Haynes PCS Kansas Avenue - High School	Х	K-5	Х					
E.L. Haynes PCS Kansas Avenue - Elementary School		K-5	Х		Х			
Hope Community PCS - Lamond		K-5	Х					
Kingsbury Day School*		Pre-School						
Lafayette Elementary School		K-5	Х		Х			
Lowell School*		K-5						
Paul PCS - International High School	Х	9-12	Χ					Х
Paul PCS - Middle School		6-8	Χ					Х
Powell Elementary School		K-5	Χ					

School Name	New Garden	Grades directly impacted by the garden	Edible Garden	Stormwater/Rain Garden	Pollinator/Butterfly Garden	Wildlife Habitat/Native Garden	Greenhouse	Other
Roots PCS		K-5	Х					
Sela PCS	Χ	K-5				Х	Х	
Takoma Education Campus @ Meyer		None#	Χ					
Washington Latin PCS - Middle		6-8		Χ				
Washington Latin PCS - Upper	Χ	9-12	Χ	Χ			Х	
West Education Campus		Pre-School	Χ	Χ	Χ			
Ward 5 Schools								
Burroughs Education Campus		K-5	Χ		Χ			
Center City PCS-Trinidad Campus~		K-5						
Edgewood Elementary		Pre-School	Χ	Χ	Х			
EW Stokes PCS Community Freedom		K-5	Χ	Χ	Χ	Χ	Х	
Friendship PCS - Woodridge Elementary	Χ	K-5	Χ					
Friendship PCS - Woodridge Middle		K-5	Χ					
KIPP DC Northeast Academy ~		6-8						
Langley Education Campus		K-5	Χ		Χ			
Mary McLeod Bethune Day Academy PCS - Slowe Campus		K-5	Χ		Χ			Х
Mundo Verde Bilingual PCS~		K-5						
Tree Of Life PCS		K-5	Х		Х			
Washington Yu Ying PCS		K-5	Х		Х		Х	
Ward 6 Schools								
Brent Elementary School		Pre-School	Х	Х	Х			
Capitol Hill Montessori @ Logan		K-5	Х					
Eastern High School		9-12	Χ					
J.O. Wilson Elementary School		K-5	Χ	Х	Х			
Jefferson MS~		6-8						
Ludlow-Taylor Elementary School		K-5	Х				Х	
Maury Elementary School		K-5	Х		Х			
Miner Elementary School		K-5	Χ		Χ			

School Name	New Garden	Grades directly impacted by the garden	Edible Garden	Stormwater/Rain Garden	Pollinator/Butterfly Garden	Wildlife Habitat/Native Garden	Greenhouse	Other
Peabody Elementary School		Pre-School	Х					
School Within School at Goding		K-5	Х	Х				
Seaton Elementary School		K-5	Х		Х			
St. Peter's Interparish*		Pre-School						
Two Rivers PCS	Х	Pre-School						Х
Tyler Elementary School		K-5	Χ	Χ	Χ	Χ	Χ	
Walker-Jones Education Campus		K-5	Χ					
Watkins Elementary School		K-5	Х				Χ	
Ward 7 Schools								
Beers Elementary School		K-5	Χ		Х			
Benning PCS - Elementary Campus		Pre-School	Χ	Χ	Χ			
C.W. Harris Elementary School		K-5	Χ					
DC Preparatory Benning Middle Campus	Х	K-5	Χ	Χ	Χ			
Drew Elementary School	Х	None#						
Friendship PCS - Blow Pierce Elementary		None#	Χ					
Friendship PCS - Blow Pierce Middle	Х	None#	Χ					
Kimball Elementary School		K-5	Х					
Nalle Elementary School		K-5			Х			
Randle Highlands Elementary School		K-5	Χ	Χ				Х
SEED PCS		9-12	Χ		Χ			
Smothers Elementary School		K-5	Χ	Χ	Х		Χ	
Sousa Middle School		6-8	Χ					
St. Coletta Special Education PCS		9-12	Χ		Χ			
Ward 8 Schools								
Excel Academy PCS		K-5	Χ					
Friendship PCS - Tech Prep	Х	9-12			Χ			Х
Hendley Elementary School	Х	K-5	Χ		Χ			
	Х	K-5	Χ	i l	i		i	

School Name	New Garden	Grades directly impacted by the garden	Edible Garden	Stormwater/Rain Garden	Pollinator/Butterfly Garden	Wildlife Habitat/Native Garden	Greenhouse	Other
Orr Elementary School		K-5	Х				·	
Thurgood Marshall Academy PCS		9-12	Х	Х	Х			

^{*} These schools are not required to fill out the SHP, therefore we do not have any additional information

 $^{^{\}sim}$ These schools incorrectly indicated on the SHP that they did not have a school garden, therefore we do not have any additional information

[#] These schools did not answer the question

Appendix N School Gardens Program Service Providers List, SY 2014-15

School Gardens Program Service Providers List, SY 2014-15	Design, construction, and maintenance	School based in class lessons	School based after school lessons	Summer lessons	Materials	Teacher PD	Technical support	Field trip site
DC Environmental Education Consortium (DCEEC) http://www.dcnaturally.org/cgi-bin/dceec.cgi?page=homeGrades: Grades: PreK-12 DCEEC provides opportunities for networking, event coordination, and program partnering among its members. They also facilitate professional development and educational opportunities that support required learning standards. Their member organizations provide environmental expertise, professional development opportunities, curricula and resources, and hands-on classroom and field -study					X	X	X	
activities to District schools. Contact: Kurt Moser kmoser@earthforce.org Cassie Hughes cassieahughes@yahoo.com University of the District of Columbia Master Gardening Program						Х	Х	
http://www.udc.edu/causes/ces/environment.htm Grades: K-12 The Master Gardening Program is open to teachers and garden coordinators. This program teaches all aspects of gardening including soil sampling and interpretation, design, plant selection, and disease and insect detection. Contact: Sandy Farber sfarber@udc.edu						*	*	
Washington Youth Garden (WYG) http://www.washingtonyouthgarden.org/ Grades: 3-6 The WYG works intensively with a select group of partner schools, teaching garden-based curriculum and installing and maintaining school gardens. The WYG supports schools in maximizing their school garden through assisting with the development of school garden teams, facilitating teacher trainings, and co-hosting community events. Contact: Charla Wanta education@washingtonyouthgarden.org	X			X	X	X	X	X
http://dcgreens.org/ Grades: K-12 DC Greens provides multiple professional development opportunities for school garden coordinators and teachers, supports school garden markets, and provides cooking demos (grades 3-8 only). Contact: Sarah Holway sarah@dcgreens.org		Х		Х	Х	Х	Х	

Arcadia Center for Sustainable Food & Agriculture (Arcadia)		Х		Х				Х
http://arcadiafood.org/								^
Grades: K-12								
Arcadia offers educational field trips at Arcadia Farm to complement								
school garden programs. The organization also holds a food- and farm-								
based summer camp for kids ages 6-10. Scholarships are available.								
Contact: Morgan Maloney morgan@arcadiafood.org								
Neighborhood Farm Initiative (NFI)	Х						Χ	Х
http://neighborhoodfarminitiative.org/								
<u>Grades:</u> 6-12								
NFI builds and maintains DC school gardens in partnership with								
students, teachers, parents, and community-based organizations. In								
addition to introducing students to hands-on activities like planting,								
weeding, digging, and harvesting, NFI facilitates opportunities to								
integrate classroom lessons with the garden by offering extra-								
curricular activities, curricula, lesson plans, and project ideas.								
<u>Contact:</u> Brenda Estrella <u>bstar73@gmail.com</u>								
Kid Power		Χ	Х	Х				
http://www.kidpowerdc.org/								
Grades: 3-8								
Kid Power is an after-school program. Their Veggie Time program								
teaches students about nutrition, cooking, and growing their own food								
in the school garden.								
Contact: Katie Harvey katie@kidpowerdc.org								
Casey Trees					Χ	Х	Χ	
http://www.caseytrees.org/								
Grades: K-12								
Casey Trees provides free trees including fruit trees to any DC school.								
They will also provide design and planting support and free tree walks								
around DC or at school campus es.								
Contact: Priscilla Plumb pplumb@caseytress.org								
District Department of the Environment (DDOE)	Х					Χ	Χ	
http://ddoe.dc.gov/service/riversmart-schools	,						, ,	
Grades: K-12								
DDOE's RiverSmart Schools Grant creates outdoor classrooms with the								
dual function of reducing stormwater runoff. It incorporates training								
for teachers. DDOE also conducts workshops (for at least 15 teachers)								
for the Project Learning Tree (PLT) curriculum. Participants become								
eligible for funding and additional resources through national PLT's								
GreenSchools! Program.								
Contact: Patricia Doan patricia.doan@dc.gov								
DC Greenworks	Χ						Х	
www.dcgreenworks.org	^						^	
Grades: PreK-12								
DC Greenworks currently offers a variety of design, installation, and								

		1	I	1		1	1	
maintenance services related to green roofs, gardens, and rain barrels.								
They are developing resources to do more in-class presentations to								
teach students about storm water management, low impact								
development, and sustainable gardening.								
Contact: Dan Triman dan@dcgreenworks.org								
City Blossoms	Χ	Х	Х	Х		Х	Χ	Χ
<u>www.cityblossoms.org</u>								
Grades: PreK-12								
City Blossoms is interested in working with schools that have already								
identified a garden coordinator and/or garden committee. Working in								
a "train the trainer" capacity, City Blossoms is available to consult on								
design, classroom activities/curriculum, teacher training, and other								
aspects of garden-related education								
Contact: Lola Bloom lola@cityblossoms.org								
REAL School Gardens	Χ	Х	Х	Χ	Х	Х	Х	
http://www.realschoolgardens.org/								
Grades: PreK-12								
REAL School Gardens builds learning gardens and trains teachers on								
how to use school gardens to teach standards-based lessons through a								
multi-year training program and one-on-one trainings.								
Contact: Jeanne McCarty JMcCarty@realschoolgardens.org								
FRESHFARM Markets		Х	Χ	Χ				
http://www.foodprintsdc.com/								
Grades: PreK-6								
FoodPrints is an educational program of FRESHFARM Markets that								
integrates gardening, cooking, and nutrition education into the								
curriculum at DC public schools.								
Contact: foodprints@freshfarmmarkets.org								
Anacostia Watershed Society		Х					Χ	Χ
http://www.anacostiaws.org								
Grades: PreK-12								
Anacostia Watershed Society engages students in three-part service								
learning programs that include classroom lessons, a boat trip on the								
Anacostia River, and a hands-on stewardship project. They work with								
each school to determine what stewardship project makes sense for								
them. Projects range from wetland plantings in the marshes along the								
Anacostia, invasive plant removal in our local parks, or the								
construction of a school garden.								
Contact: Ariel Trahan atrahan@anacostiaws.org								
21 st Century School Fund							Χ	
http://www.21csf.org/csf-home/DCPortal.asp								
Grades: PreK-12								
21 st Century School Fund promotes the improvement of urban public								
school facilities including school grounds. They look to enhance								
community accessible designs that welcomes the full enjoyment of								
- 1 The second s		1	1	1	1	L	l	

schoolyards, athletic facilities, and open space by students and school neighbors for recreation, physical exercise, and environmental education. Contact: Nancy Huvendick nhuvendick@21csf.org								
Natural Partners /Monarch Sister Schools Program	Х	Х	Х	Х	Х	Х	Х	
Grades: PreK-12								
http://monarchsisterschools.org/								
The focus of Natural Partners is on involving students in "habitat								
restoration" for the Monarch butterfly. In the U.S. and Canada,								
students are responsible for planting and maintaining Monarch Habitat								
Gardens in their schoolyards. To help organize maintenance activities,								
they are in the process of helping schools organize their own Garden								
Clubs with the support of a garden consultant associated with the								
Monarch Sister Schools Program.								
Contact: William Dent wdent@npartners.org								
Millennial Farmers	Х	Х	Х				Χ	
Grades: PreK-12								
http://www.millennialfarmers.com/index.html								
Millennial Farmers is a social enterprise with a focus on giving all DC								
school children access to healthy, delicious, fresh food. They do this								
through constructing V.E.G. Vertical Edible Garden) towers in the								
District of Columbia. These towers are created from mostly reclaimed								
materials, and save huge amounts of water and space, as 'growing up'								
is the way to go! They would like to set up towers in schools								
throughout DC and are happy to train teachers and garden								
coordinators on how to maintain these towers. They also have several								
lessons created for students in grades K-12 around plant growth and								
vertical gardening.								
<u>Contact:</u> Niraj Ray <u>niraj@millennialfarmers.com</u>								

Appendix O Recommended Curricular Resources for School Gardens

Grade	Curriculum Description	Subject	Cost
К-4	Botany on Your Plate introduces the world of plants through foods we eat. Children explore edible roots, stems, leaves, flowers, fruits, and seeds through observation, dissection, journaling, discussion of findings, and, of course, tasting! Supports standards in nutrition, math, language arts, and social studies. Every lesson includes plant snacks that spark curiosity, interesting questions, and social dialogue to fuel the learning process. http://www.gardeningwithkids.org/books.html	NUTRITION MATH E.L.A. SOCIAL STUDIES	\$21
К-8	Math in the Garden uses a mathematical lens to take children on an education-filled exploration of the garden. Dozens of hands-on activities hone math skills and promote inquiry, language arts, and nutrition. All were developed to support mathematics and science standards and were extensively trial-tested by educators and youth leaders nationwide. http://www.gardeningwithkids.org/books.html	MATH	\$30
К-8	<u>PLT curriculum</u> resources help today's educators teach tomorrow's decision makers about the environment. The goal is to teach students <i>how</i> to think, not <i>what</i> to think about the environment. Contact Grace Manubay at grace.manubay@dc.gov for information on professional development. http://www.plt.org/curriculum	SCIENCE SOCIAL STUDIES ENVIRONMENT	FREE w/PD
1-5	Growing Healthy Habits Grow It, Eat It! curriculum provides nutrition education through gardening at schools. This curriculum was developed specifically for educators in Maryland reaching low-income youth who wish to use gardening as a tool for improving nutrition-related behaviors. http://md.nutrition-ed.org/	E.L.A. SCIENCE HEALTH	FREE
1-6	Five Minute Field Trips activities have been grouped into three sections: Awareness, Understanding, and Action. Sequencing activities in this order is a natural flow for learning about our world. These are the "classics" of Environmental Education. http://www.geoec.org/lessons/5min-fieldtrips.pdf	ENVIRONMENT	FREE
2-6	The Growing Classroom was developed by the Life Lab Science Program and revised to meet current science standards and educator needs. This bestselling teacher's manual features strategies for managing garden-based science instruction — including planning a garden laboratory, facilitating investigative lessons on ecology and nutrition, and involving the community. http://www.gardeningwithkids.org/books.html	SCIENCE	\$40

4-8	<u>LiFE Series Curriculum Set</u> engages students in hands-on	SCIENCE	\$90
	investigations of our complex food system and how to use		·
	scientific evidence to make healthy food and activity choices.		
	Growing Food; Farm to Table & Beyond; and Choice, Control &		
	Change were developed by renowned educators at Teachers		
	College of Columbia University, and are based on years of		
	research. Although the modules are ideally used in consecutive		
	years, each is a strong, stand-alone curriculum.		
	http://www.gardeningwithkids.org/books.html		
5-12	French Fries and the Food System provides kids from varied	SCIENCE	\$27
	backgrounds with a fertile environment in which to develop an	SOCIAL STUDIES	·
	appreciation for the links between farming and food systems.		
	Seasonal lessons range from practical, hands-on activities to		
	social and economic aspects of the food cycle. The lessons and		
	activities are organized by seasons. This book is an excellent		
	resource for classroom and community educators!		
	http://www.gardeningwithkids.org/books.html		
6-8	The Nourish Middle School Curriculum Guide offers a rich set of	SCIENCE	\$125
	resources to open a meaningful conversation about food and	HEALTH	7
	sustainability. Beautifully designed and brimming with big ideas,	E.L.A.	
	the materials contain a viewing guide, six learning activities,		
	action projects, student handouts, a bibliography, and a glossary.		
	http://www.nourishlife.org/teach/curriculum/		
9-12	Life Learning Academy's Organic Opportunities uses food as a	BUSINESS	FREE
	tool to engage students in academic learning, vocational training,	MATH	
	and personal development. By involving students in every	NUTRITION	
	component of the food system, Organic Opportunities also aims		
	to alter students' relationship with food, inspiring them to		
	develop healthy lifelong eating habits.		
	http://www.lifelearningacademysf.org/pdf/curricula/6.5 EarthCu		
	rricula OrganicOpportunties.pdf		
K-12	Dig Art! Cultivating Creativity in the Garden is a new project	ART	FREE
	guide for educators working with youth that integrates gardening	HEALTH	
	with the arts. The arts activities in this guide will help to teach		
	ecological literacy and inspire new enthusiasm for garden-based		
	learning. Dig Art! activities support youth to creatively express		
	themselves and their garden experiences through gourd art,		
	printmaking, time-lapse photography, and other creative		
	projects. http://blogs.cornell.edu/garden/get-activities/signature-		
	projects/dig-art/		
K-12	Teaching the Food System offers a curriculum, comprised of	VARIES	FREE
	eleven classroom-ready modules, that spans issues in the food		
	system from field to plate. The material is focused on issues in		
1			
	the U.S. food system but also touches on some of their global		
	the U.S. food system but also touches on some of their global implications. Each module includes lesson plans, slides, handouts,		

FREE
FREE
FREE
FREE
FREE
FREE
FREE

Appendix P Outdoor Classroom Design Guide

This document provides design guidelines for outdoor classrooms (the structure where students gather to learn) and the school garden (the larger area encompassing the outdoor classroom). Outdoor classrooms complement and expand school garden sites by providing a gathering area for teaching, but they are also multi-use spaces that serve as classrooms that support standards-based learning across subject areas. Developing an outdoor classroom may be the starting point for a school garden program, or it may increase the impact of an existing program by providing a suitable venue for instruction. Outdoor classrooms and school gardens may be initiated by school administration, teaching staff, PTA's, Home and School Associations, or community organizations, or may be included as part of whole school modernization. Because they are highly visible to the neighborhood, it is important to design outdoor classrooms and school gardens through a documented participatory process with input and buy-in from the broader school community. It is useful to enlist a consortium of people who will be invested in the project on an on-going basis. A successful outdoor classroom and school garden may be possible on a modest budget with minimal construction.

Expected Site Elements:

- Planting beds
- Organic soil (60 percent top soil/40 percent compost)
- Mulch (shredded hardwood or straw)
- Hose bib with hose rack (with two spigots- one for hose and one for irrigation, exterior and easily accessible, placed within the garden if new construction)
- Plants (a variety of edible and non-edible species)
- Shade tree(s), trellises, or awnings.
- Seating (may be moveable)
- Worktables (may be moveable)
- · Pathways (around planting beds, through pollinator garden, etc.)
- Tool shed (large storage bench/box that is weatherized and secure no further than 100 ft from gardening area. Storage immediately available inside the school may supplement outdoor storage space)
- Signage
- Fencing (height and type depending on local context)
- Access for large vehicles/supplies
- All-weather electrical outlet
- Drip irrigation (for gardens larger than 200 square feet)

Potential Site Elements:

- Composting area
- Pollinator garden with paths to invite investigation
- Wildlife habitat area with paths to invite investigation
- Drip irrigation (for gardens smaller than 200 square feet)
- · Rain garden
- Outdoor kitchen

- Digging bed (for younger students)
- · Handwashing station
- · Outdoor science lab
- Arboretum
- · Greenhouse/hoop house
- Interactive learning stations
- Community garden plots
- Wi-Fi access
- Beehive
- · Chicken coop
- Pond
- Mounding

Siting: The school garden should be clearly defined and located with the possibility of expanding activities in the future. The space should be inviting and encourage classroom use any time the weather is at all agreeable, including during a warm snap in winter. Capitalize on site features available by deliberately connecting to an existing stream or using a large shade tree for the gathering area or linking pathways to a natural habitat area. Ensure that enthusiasm for the garden does not overwhelm space that students require for active play and athletic activities.

The outdoor classrooms should be located within the school garden in a well-used and highly visible part of the school grounds that is easily accessible for students and teachers. Consider environmental factors, including noise, fumes from passing vehicles, sunlight, and slope; it should articulate with existing or planned natural wildlife habitat areas. If there are plans to expand or re-build the school in the foreseeable future, try to ensure the outdoor classroom and school garden is in a place that will remain undisturbed.

Solar aspect/shade: The school garden plots must receive 6-8 hours of direct sunshine a day. However, the outdoor classroom must be shaded either naturally with trees or trellises or with awnings, umbrellas or canopies. Student seating should not face south.

Accessibility: Walkways should be well-defined, and accessible to students including those with disabilities. Refer to the current ADA standards for minimum design requirements. Remember to apply these standards to all program spaces associated with the outdoor classroom. Garden beds should be no wider than 4 feet for middle school and high school students and 3 feet for elementary school and early childhood students. Consider having at least one raised bed accessible to students in wheelchairs. The school garden and the outdoor classroom will need large enough work areas so that all students can easily pass through. The tool shed/box should including shelving, and storage options for both adultand child-sized tools and located in a central area possibly near the outdoor classroom.

Visibility/Safety: There should be clearly defined perimeters for the outdoor classroom and garden areas; a fence may be preferable, with clear lines of sight throughout avoiding potential hiding spaces. If possible, the outdoor classroom should also be visible from points within the school (windows in nearby classrooms, administrative spaces).

Materials: The outdoor classroom should be built with natural materials. If water is being collected from the roof of the outdoor classroom the roofing material must be non-toxic and non-leaching. Strictly limit use of concrete to high traffic areas; if hardscape is required, permeable paving or local stone (that is too heavy to throw) is encouraged. Note that high-grade engineered wood fiber playground surfacing is certified for wheelchair use. Raised beds should be built of a minimum of 2-inch thick wood or non-toxic manufactured wood, not permanent masonry, and filled with organic soil/compost at a 60/40 ratio. Soil should be filled to 4 inches below top of garden bed and 2 inches of organic mulch (shredded hardwood or straw) should be placed on top of the soil. Pressure treated wood, plywood, plastic lumber with wood fibers, and tires are strongly discouraged as these products contain toxins that leach into water at dangerous levels. Because teachers need to re-design garden plot locations from time to time as program needs change, garden plots must be re-locatable. Avoid weed cloth as it has little impact on suppressing weeds in the long-term and creates maintenance issues.

Outdoor Classroom: The outdoor classroom must be a well-defined shaded space that includes student workstations where teachers can easily engage with each student. An outdoor whiteboard is desirable (flipchart stands stored inside could substitute) and must be situated so that all students can easily read it. Seating can be either fixed or flexible, depending on the site, but should easily accommodate up to 35 students. A teacher demonstration table and student workspaces should be available. If not permanently on site, as with picnic tables, these should be easily portable and on-hand in a storage shed or nearby in the school. The outdoor classroom area may include elements such as an outdoor kitchen and/or a science lab.

Plants: Perennial plant material should be chosen based on each specific site condition and with interest in all four seasons. Preference should be given to a variety of native plant species. The visual unity of the site is less important than the educational value of a broad range of different plants that can be used as teaching examples and that are sustainable in terms of biodiversity and susceptibility to extreme weather, insects, and disease. Take care to avoid poisonous plants.

Signage: Educational signage must be placed throughout the garden. Signage must be age-appropriate and student-centered. Consider writing signs in multiple languages. Signs should identify elements as well as describe various processes and systems such as:

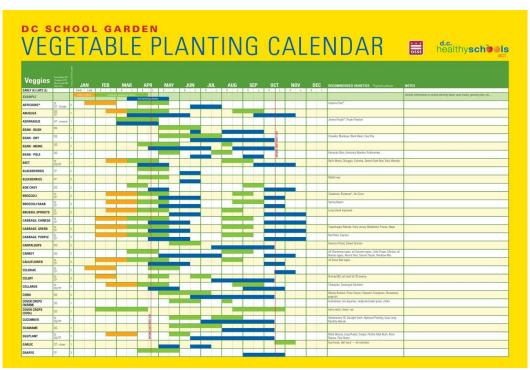
- Entrance sign with space for posting announcements (highest priority)
- Garden rules and procedures
- Native and edible plantings
- Composting systems
- Pollination
- Storm water management
- Soil composition
- Nutrition
- Beneficial Insects
- "Do Not Mow" for in-ground beds near lawns.

Maintenance: The outdoor classroom should be designed for low maintenance with a specific maintenance plan written for each outdoor classroom and garden area. A maintenance agreement must be signed by the Principal and the school garden coordinator. Planting beds, pollinator garden areas,

and habitat areas must be very clearly differentiated from lawn areas that require mowing in order to avoid having native plants mistaken for weeds and mowed. Ensure that the irrigation system (if applicable) is simple enough so that the school community can maintain it. Hose bib keys should be given to the school garden coordinator, building engineer, and principal (three keys total).

Approval: Plans, details, and specifications should be submitted to the School Garden Specialist at the Office of the State Superintendent of Education for approval.

Appendix Q School Garden Planting Calendar





Appendix R 2014 School Garden Grant Recipients

School Name	New/Existing School Garden	Ward	Type	Award Amount
Capital City PCS	Existing	5	PCS	\$15,000
Capitol Hill Montessori @ Logan PCS	Existing	6	DCPS	\$15,000
Columbia Heights Educational Campus	Existing	1	DCPS	\$15,000
DC Bilingual PCS	Existing	1	PCS	\$12,480
DC Prep PCS - Benning Campus	Existing	7	PCS	\$15,000
E.L. Haynes PCS	Existing	4	PCS	\$9,088
Eastern Senior High School	Existing	6	DCPS	\$15,000
Elsie Whitlow Stokes PCS	Existing	5	PCS	\$15,000
H.D. Cooke Elementary School	Existing	1	DCPS	\$15,000
Harriet Tubman Elementary School	Existing	1	DCPS	\$14,000
Horace Mann Elementary School	Existing	3	DCPS	\$15,000
J.O. Wilson Elementary School	New	6	DCPS	\$15,000
John Eaton Elementary School	Existing	3	DCPS	\$12,500
Mundo Verde Bilingual PCS	Existing	5	PCS	\$15,000
Seaton Elementary School	Existing	6	DCPS	\$15,000
Sousa Middle School	Existing	7	DCPS	\$15,000
Thurgood Marshall Academy PCS	Existing	8	PCS	\$11,700
Tree of Life Community PCS	New	5	PCS	\$15,000
Tyler Elementary School	Existing	6	DCPS	\$15,000
Washington Yu Ying PCS	Existing	5	PCS	\$15,000
Watkins Elementary School	Existing	6	DCPS	\$15,000

Appendix S 2015 School Garden Grant Recipients

School Name	Existing/New	Ward	Туре	Award Amount
Bridges PCS	Existing	4	PCS	\$ 15,000.00
Browne Elementary School	New	5	DCPS	\$ 15,000.00
Burroughs Education Campus	Existing	5	DCPS	\$ 15,000.00
Cardozo High School	New	1	DCPS	\$ 14,945.00
Cleveland Elementary School	Existing	1	DCPS	\$ 12,110.00
Columbia Heights Education Campus	Existing	1	DCPS	\$ 15,000.00
Creative Minds International PCS	New	5	PCS	\$ 14,400.00
Friendship PCS - Tech Prep	New	1	DCPS	\$ 14,269.00
H.D. Cooke Elementary School	Existing	8	DCPS	\$ 15,000.00
Hendley Elementary School	New	3	DCPS	\$ 15,000.00
Horace Mann Elementary School	Existing	6	DCPS	\$ 14,990.00
Houston Elementary School	New	7	DCPS	\$ 15,000.00
J.O. Wilson Elementary School	Existing	8	DCPS	\$ 15,000.00
Jefferson Middle School	Existing	6	DCPS	\$ 15,000.00
Ketcham Elementary School	New	6	DCPS	\$ 12,670.00
Ludlow-Taylor Elementary School	Existing	6	PCS	\$ 15,000.00
Mundo Verde Bilingual PCS	Existing	6	DCPS	\$ 14,991.00
Peabody Elementary School	Existing	7	DCPS	\$ 15,000.00
Randle Highlands Elementary School	Existing	6	DCPS	\$ 14,252.96
Seaton Elementary School	Existing	7	DCPS	\$ 15,000.00
Sousa Middle School	Existing	3	DCPS	\$ 15,000.00
Stoddert Elementary School	Existing	8	PCS	\$ 14,966.50
Tubman Elementary School	Existing	6	DCPS	\$ 12,000.00
Tyler Elementary School	Existing	5	PCS	\$ 15,000.00
Washington Yu Ying PCS	Existing	4	DCPS	\$ 15,000.00
West Education Campus	Existing	4	DCPS	\$ 11,000.00