

1. Project Justification

Summary

The Chicago Botanic Garden's Windy City Harvest (WCH) program has untapped potential as a professional training and workforce development program for beginning farmers, dislocated workers, and previously incarcerated adults seeking entry into Chicago's growing urban agriculture sector and local food system. We propose a capacity building effort to expand certificate course offerings for some of the Windy City Harvest's most capable participants and thereby increase their qualifications for employment in agricultural science, agri-business, and culinary industry fields. The initiative will train a skilled workforce who will anchor community redevelopment efforts aimed at stabilizing Chicago's food desert communities where no grocery store exists within a one mile radius.

Specifically, the Chicago Botanic Garden (CBG), a 501(c)(3) cultural and educational institution in Glencoe, Illinois, seeks a Museums for America, Community Anchors, 24-month grant of \$150,000 from the Institute for Museum and Library Sciences (IMLS) to be matched with X from CBG, to support: (1) the recruitment and training of 75 to 90 beginning urban farmers, skilled farm workers, and culinary professionals in six industry-specific certificate courses offered during the two-year grant cycle—***business and entrepreneurship for local foods, aquaponics and vertical farming systems, rooftop gardening, season extension farming, institutional-scale composting, and value-added products and food safety***; (2) the development of six tangible educational products in the form of five new certificate courses and amendments to the existing business and entrepreneurship for local foods course; (3) the production of 50,000 pounds of fresh produce at the collected Windy City Harvest farm sites, which, together, will improve food access in Chicago's food insecure communities through service to 21,400 low-income clients at Women, Infants, and Children centers, homeless shelters, human services organizations, and farmers' markets.

The Windy City Harvest Program

The Windy City Harvest program is a true community anchor in the sense that it provides a pipeline to jobs training and employment for offenders, ex-offenders, and dislocated workers, who lack a clear and accessible path to the workforce. WCH partners with the Cook County Sheriff's Office Vocational Rehabilitation (VRIC) program, which annually serves 80 to 90 non-violent male offenders at an alternative sentencing facility in the Little Village neighborhood. The one year program is split into two phases, a four-month military style "boot camp" and an eight-month post-release program. Through hands-on, closely supervised training 20 hours per week for eight weeks, participants learn sustainable farming skills while tending a three-quarter acre farm, a composting system, and a 6,000 gallon aquaculture installation. The garden program exposes participants to all aspects of a successful workplace environment, such as finishing tasks on time, teamwork, and respect for others. Staff encourage the participants to consider their time in the garden is a real job, with real opportunities for placement after release.

The ultimate goal is to identify and refer roughly 30 ideal candidates for placement in the transitional jobs program. These adults are funded through a grant from the City of Chicago Department of Family and Support Services and work 13 weeks, for at least 30 hours per week, while receiving support from VRIC personnel and case managers in arranging for housing, childcare, transportation, and other needs. Candidates apply for paid positions at Chicago Botanic Garden/Windy City Harvest urban agriculture sites throughout the city, such as the Kraft Foods Garden in Northfield, the new one-and-a-half acre Rodeo Farm and compost facility near VRIC, a two-acre incubator garden known as Legends South in Bronzeville, and a new farm site at McCormick Place, recognized as the Midwest's largest rooftop vegetable garden. The program has a strong track record of success; in 2012, 26 ex-offenders completed transitional jobs, and 19 were placed in unsubsidized employment for at least 90 days, resulting in a 73 percent placement rate.

The longest-standing element of Windy City Harvest is the nine-month professional certificate, offered to approximately 15 students annually. The program partners with the City Colleges of Chicago's Richard J. Daley College / Arturo Velasquez Institute (AVI) to offer the only certificate in urban horticulture and sustainable agriculture accredited by the Illinois Community College Board (ICCB) and approved for

Workforce Investment Act (WIA) funding. Most students are eligible for full tuition reimbursement through WIA funding, and recruitment aims at the selection of two to five ex-offenders each year. The curriculum includes six months of classroom work at 20 hours per week followed by a three-month paid internship at 32 hours per week and carries 31 credit hours. From February through mid-June, certificate students learn in the classroom and through hands-on greenhouse instruction. During the internships, students receive training in sustainable urban agriculture at Windy City Harvest sites and community partner organizations, such as Neighborspace, Rick Bayless Garden/Pilsen Community Market, and FarmedHere. In the final month of classroom training, students create a business plan for a local food enterprise that includes crop plans and project yields, staffing needs, an equipment order, and a budget.

To date, 89 percent of students in the nine-month certificate program have found employment at more than 20 organizations throughout Chicago, including FarmedHere, City Farm, Midwest Foods, Uncommon Ground, Feed Restaurant, Whole Foods, and the Garfield Park Conservatory. For the food insecure communities served by the program, the benefit of Windy City Harvest (WCH) extends beyond education and job training. In 2013, the Windy City Harvest program generated more than 40,000 pounds of produce; donated more than 17,000 pounds of produce to feed an estimated 24,285 low-income residents at food pantries, community health centers, and Women, Infants, and Children (WIC) centers; and sold more than 20,000 pounds at community and farmer's markets, 38 percent of which was distributed to an estimated 10,900 residents who are recipients of government sponsored food programs, such as the Supplemental Nutrition Assistance Program (SNAP), WIC, and senior farmers' market vouchers. There is perhaps nothing that anchors a community more strongly than the food it grows and eats.

Need and Opportunity

Windy City Harvest serves populations that traditional U.S. food systems and employment opportunities have bypassed, including ex-offenders and African American and Hispanic residents of food desert communities where no grocery store exists within a one mile radius. A 2009 report by Chicago-based Mari Gallagher Research & Consulting Group, the firm that conducted the first study of Chicago food access, found that about 384,000 residents live in food deserts. That is enough to fill U.S. Cellular Field ten times. Most of them are African-Americans on the West and South sides. Nearly 200,000 of them are children and more than 100,000 are single mothers. A 2006 report from the same consulting group found in a typical African-American block in Chicago, the nearest grocery store is roughly twice as distant as the nearest fast food restaurant. That means, for African Americans, healthy food is more difficult to access than other options.

Three of the neighborhoods served by the Garden's urban agriculture programs, North Lawndale, Washington Park, and Grand Boulevard, have been identified as food deserts that "pose serious health and wellness challenges to the residents who live within them and to the City of Chicago as a whole." Additional studies have shown that in North Lawndale, more than 46 percent of the children are obese, nearly 17 percent of newborns have low birth weight, and the infant mortality rate is 55 percent higher than the city as a whole. As the 2011 Mari Gallagher report notes, "unless conditions improve we predict continued premature death and suffering of Chicago Food Desert residents from diabetes, hypertension, cardiovascular disease, and certain kinds of cancer. We also predict continued high rates of obesity among adults and children."

A goal of the Chicago Botanic Garden in the ten-year strategic plan is to serve as a model for how a botanic garden can make vital, year-round contributions toward strong local food systems. The major objectives under this goal are to 1) educate and train the region's best urban agriculture professionals; 2) create effective transitional, seasonal, and permanent jobs; 3) foster and support individual entrepreneurship; and 4) balance access to fresh produce for residents in high-need communities with earned income opportunities for the program. Windy City Harvest, launched in 2007 and previously supported by a USDA Beginning Farmers and Ranchers Development Program grant and the Illinois Department of Commerce and Economic Opportunity, delivers on these objectives.

Now is the time to expand the Garden's formal training and internship programs in sustainable agriculture. The City of Chicago, farm collectives, private businesses, social service agencies, and non-profits are increasingly coalescing around urban farming as a vehicle to stabilize and build communities on Chicago's South and West sides. The City of Chicago Department of Zoning and Land Use Planning (DZP) recently amended the zoning code to establish a legitimate place for urban agriculture in the code as an activity that can happen "by right" (without seeking special permission). The Chicago's Department of Housing and Economic Development's (DHE) Green Healthy Neighborhoods, which will appear before the city's planning commission in the coming weeks, recently laid out a plan for the creation of a 13-square-mile green belt with a strong focus on urban agriculture within the South Side neighborhood of Englewood. Through the Advocates for Urban Agriculture, Windy City Harvest collaborates with many of the organizations that will be involved in the project, including Growing Home, Angelic Organics Learning Center, and City Farm. These organizations and Growing Power's Iron Street Farm all have WCH graduates on staff.

Presently, demand for enrollment in the Windy City Harvest nine-month certificate program far exceeds capacity. The 2014 program attracted 100 applicants for 24 class spots (a 17 percent increase over 2012), anticipating some attrition. Recent discussions among WCH staff, collaborating organizations, and WCH's beginning farmer graduates indicated that additional industry-specific certificate courses are needed to accommodate rising demand for specialized skills and help beginning farmers overcome recognized barriers to employment, including access to land, access to capital and credit, and access to markets. In sum, this project will establish CBG's Windy City Harvest program's as a firmly rooted community anchor, while educating and training adults with recognized employment barriers to respond to the needs of Chicago's food insecure communities.

2. Project Work Plan

This project will have a 33-month duration with a pre-IMLS award phase funded by CBG (January 1, 2014-September 30, 2014) followed by a two-year project phase (October 1, 2014-September 1, 2016) during which CBG will partner with IMLS to achieve its vision. The project will be managed by Angela Mason, Director of Community Gardening, with support and guidance from Kelly Larson, Manager of Windy City Harvest, and Kate Gannon, Program Support. The Garden will contribute in-kind contributions of staff time from these key project staff to support program activities, in a 50/50 cost share split evenly with IMLS. The target audience for these programs is Windy City Harvest certificate graduates and other individuals with a demonstrated knowledge of farming seeking professional training and certification for work in Chicago's growing urban agriculture sector and the local food system. At least 50 percent of participants will be residents of low-income communities, including people eligible under the Workforce Investment Act (WIA) with demonstrated employment barriers such as educational deficiencies, history of incarceration, and single heads of household. Further, at least 50 percent of program participants will be graduates of the Windy City Harvest nine-month certificate program, with representation from among the formerly incarcerated and the otherwise hard-to-employ. Specific activities for this project are included in the Schedule of Completion provided below. The project will achieve the following objectives during the two-year IMLS grant cycle.

Outcome 1: Education and Training

Recruit and train 60-70 beginning urban farmers, skilled farm workers, and culinary professionals in four industry-specific certificate courses—business and entrepreneurship for local foods, aquaponics and vertical farming systems, rooftop gardening, and season extension farming—offered during both IMLS grant years. Recruit and train an additional 15-20 students in two industry-specific certificate courses (institutional-scale composting and value-added products and food safety) piloted during the second IMLS grant year.

Outcome 2: Curricular Development

Enhance the suite of Windy City Harvest curricular offerings through the development of five certificate courses (aquaponics and vertical farming systems, rooftop gardening, season extension farming, institutional-scale composting, and value-added products and food safety) over the course of the pre-IMLS phase and two-year grant and through the revision of the business and entrepreneurship for local foods course.

Outcome 3: Food Access

Improve access to healthy, affordable produce for low-income residents of Chicago's food desert communities by producing 50,000 pounds of fresh produce, at least 15,000 pounds of which will serve an estimated 21,400 low-income clients (based on the USDA's estimate of .7 pounds serving one client) at Women, Infants, and Children centers, homeless shelters, human services organizations, and farmers' markets that accept federal food benefits.

Activity Schedule

The idea for the development of industry-specific certificate courses emerged in 2012. With support from a USDA Beginning Farmers and Ranchers grant, WCH convened a master planning meeting of WCH certificate graduates and beginning farmers recommended by Growing Home, City Farm, and other collaborators to discuss their employment prospects as well as their interests in pursuing further educational opportunities. The meeting indicated that additional training in specific areas was needed to strengthen and grow urban agriculture enterprises in Chicago and laid out a realistic and achievable three-year goal to certify 20 to 40 beginning farmers in urban agriculture entrepreneurship. These efforts have been highly successful, and prompted CBG to enhance and deepen its impact through course revisions aligned to national NIFA standards, as well as expanded course offerings for promising candidates.

Pre-IMLS phase

Now in its first year, the ***business and entrepreneurship for local foods***, developed in partnership with the DePaul University M.A. program in social enterprise, is serving 11 students, 9 of whom are Windy City Harvest graduates. The course meets on Monday and Wednesday nights, from Oct. 7, 2013 to January 22, 2014, at Daley College's Arturo Velasquez Institute, and is taught by Sean O' Farrell. The instructional materials incorporate business components of several agriculture curricula approved by the Illinois Community College Board and developed at Illinois Community Colleges (Black Hawk, Joliet Jr. College, Lincolnland Community College) through an Illinois Department of Commerce and Economic Opportunity grant. Topics include crop enterprise budgeting and accounting; financing for small farms and food businesses; land access and leases; direct and indirect marketing of produce; and food industry-specific business licensing. Student learning and engagement are assessed through attendance, quizzes, pre- and post-evaluation surveys; and a final project, in which each student develops and writes a formal business plan that outlines a strategy for producing vegetable crops and agricultural products to sell in commercial markets. Weekly guest speakers representing financial firms, farm collectives; and DePaul University faculty, including Ron Nahser, Ph.D., Senior Wicklander Fellow at DePaul's Institute for Business and Professional Ethics, support the creation of students' business plans. With only limited recruitment efforts, staff report that demand for the course has outpaced capacity—15 students applied for 11 course slots in 2013—and growth in student applications and enrollment is expected in the coming year.

Concurrently, Windy City Harvest staff established eight incubator plots on a 2.5-acre mixed-income development site in Bronzeville, at 4451 S. Federal, the location of the former Robert Taylor home. The ***incubator program*** assigned two promising Windy City Harvest certificate graduates, Darius Jones and Rocio Herrera, quarter acre plots to grow and sell produce, expand their market, and locate permanent sites of operation. Kelly Larson, manager of the Windy City Harvest program and a member of the steering committee for the Chicago Advocates for Urban Agriculture, mentors the students and provides assistance with cover crop installation, soil fertility maintenance, and organic fertilization. Already the initiative has resulted in two entrepreneurial ventures, Urban Aggies, Cio's Kitchen, that together increase community access to healthy produce through an on-site farm stand, food truck, and active Facebook and Twitter marketing presence.

Based on staff recommendations and criteria found in the USDA's National Institute of Food and Agriculture (NIFA), Secondary Education, Two-Year Postsecondary Education, and Agriculture in the K-12 Classroom Challenge Grants Program (SPECA), this initiative will revise and enhance the business and entrepreneurship for local foods certificate course and the incubator program. From January to June 2014,

prior to the start of the grant, Mason will meet with O'Farrell and Larsen to review the curricula, identify areas for modification, and incorporate these in program revisions. The business and entrepreneurship for local foods certificate and incubator programs will be offered during this same time frame in 2015 and 2016.

Prior to the IMLS grant phase, from December through June 2014, Mason will engage a thorough and inclusive search to recruit and hire qualified applicants to fill three open instructor positions for certificate courses in **rooftop gardening**, **institutional-scale composting**, and **value-added products and food safety**. Clearly articulated job descriptions are enclosed in the budget justification. The positions will be advertised internally and posted to external candidates through the AUA list server, the Chicago Food Policy Advisory Council list server, the Chicago Botanic Garden website, and the Windy City Harvest Google group. Instructors will be responsible for assisting Mason and Larson in the design and development of the curricula and will teach the certificate courses. Each instructor will be paid a flat consulting fee of \$3,000 for curricular development, and a \$3,500 fee for instructional delivery services, including lectures, student evaluation, and communication with project partners, community members, CBG staff and the media as required.

IMLS phase

During year one of the grant, from October to December of 2014, three 14-week, four credit-hour industry-specific certificates—in *rooftop gardening*, *season extension farming*, and *aquaponics and vertical farming*—will be piloted, each serving 8-10 students and making use of the Garden's exceptional institutional facilities and resources.

The rooftop gardening course will take place on a half-acre vegetable plot that sits atop a 20,000-square-foot McCormick Place rooftop garden, which broke ground in June 2013 as the largest farm-to-fork rooftop garden in the Midwest. The garden site is managed by Windy City Harvest staff and employees, including previously incarcerated transitional jobs graduates. The cultivation and harvest of head lettuce, bush beans, cherry tomatoes, hot peppers, Parisian carrots, Japanese turnips, kale, fennel, basil, and other vegetables, herbs will expand over the next two years to provide organic, ultra-local produce and seasonings through Savor, McCormick Place's catering and restaurant provider. All students will obtain Occupational Safety and Health Administration (OSHA) training in competent person fall protection. The curriculum will cover topics in crop planning for shallow-rooted rooftop crops; the production of seedlings and direct seeding dates utilizing season extension methods; harvest and sales record-keeping; and management of inventory site supplies and equipment. During the second grant year, rooftop gardening will be offered from June to September 2015.

According to a 2012 article published in the *Medill Reports*, Chicago has more green roofs than any other U.S. town. Planted environments are featured on the roofs of Chicago City Hall, Morningstar Inc. investment firm, retirement communities, residential and retail skyscrapers, youth development centers, and food businesses such as Uncommon Ground, where a Windy City Harvest certificate graduate serves as the farm manager. The Garden's Daniel F. and Ada L. Rice Plant Conservation Science Center Green Roof Garden, recently awarded for distinction at the 2012 meeting of the Green Roofs for Health Cities conference, conducts the largest, most encompassing green roof plant trials in the country. Approximately 40,000 plants representing 200 different species and cultivars are currently under evaluation within three different soil levels (four, six, and eight inches deep) on the 16,000-square-foot green roof. With a growing body of knowledge related to intensive green roof plant selection, aesthetics, and survivorship, CBG is well positioned to educate and train adults in this growing field. The rooftop garden at McCormick Place is expected to yield 4,000 pounds of produce this year, and more in years to come, while serving as an ideal learning and training site for the rooftop gardening class.

The season extension certificate course will be offered at the new two-acre Legends South garden in Bronzeville, offering opportunities for collaboration with then incubator farmer program. Chris Prochot, the VRIC farm coordinator and a 2010 Windy City Harvest certificate graduate, will teach the course, at 25

percent salary in each of the two grant years, in a 50/50 cost share split evenly between the Garden and IMLS. The curriculum, derived from Elliot Coleman's cold weather growing techniques, is used by Michigan State University and French countryside growers. In small urban farms of a quarter or half acre, season extension farming is particularly important because it allows small production farmers to fulfill demand ahead of competitors. Bringing high-demand produce, such as tomatoes, to market early in the growing season leads to higher revenue and the sustainability of city farms that operate on a small footprint. During the second grant year, season extension farming will resume from October to December 2015.

Windy City Harvest maintains two aquaponics systems, a 500 gallon tank at VRIC and a 300 gallon tank at AVI. These indoor farming facilities are used to raise tilapia and microgreens in a symbiotic, closed loop system, in which plants are fertilized by ammonia from fish waste that is funneled into a soilless reservoir. Andy McHee, a skilled part-time employee who constructed the aquaponics system at VRIC and trained participants, is now assisting Larsen in developing a curriculum for the aquaponics certificate. His resume is included as a supporting document and highlights his strong experience and qualifications. Course content is derived from *Aquaponic Food Production*, a comprehensive text on aquaponics by Rebecca L. Nelson. Each student will apply growing techniques using their own ten gallon aquarium and grow bed. Topics will cover botany; closed aquaponic methods, including raft, NFT, media-filled systems; fish biology, selection, and nutrition; pests and diseases; water quality dynamics; nitrification and nutrient availability for plants; permits and regulation; and best aquaculture practices. During the second grant year, aquaponics and vertical farming will resume from October to December 2015.

Since 2010, Farmed Here, a sustainable indoor farming company in Bedford Park, has hired nine Windy City Harvest certificate graduates, including several with a felony background. The company has a 90,000 square-foot growing space and distribution contracts with Whole Foods and other large grocery store chains. Aquaponics and. With a need for specialized skills and training in aquaponics, FarmedHere, is an established gateway to the workforce for WCH graduates with demonstrated employment barriers and an interest in physical labor. Other Chicago companies, universities, and non-profit organizations, such as 312 Aquaponics, the Plant, the Loyola Center for Sustainability, and the Garfield Park Conservatory are evidence of the increasing recognition of vertical farming as part of a viable economic strategy for the rehabilitation of underutilized industrial warehouses. As a supportive partner, FarmedHere will provide recommendations for the development of Windy City Harvest curriculum.

Certificate courses in institutional-scale composting and value-added products and food safety will be developed by Larsen during grant year one, from October 2014 to September 2015. A modular-based curricular model, in which course units do not follow a sequential progression, but can be learned in any order, will allow for flexibility of scheduling. VRIC and the Cook County Environmental Control Department made specific requests for the institutional-scale composting certificate, and the market need for training in this area is clear. Research shows that the cost for compost is the single greatest expense for building a farm site and on-site, organic composting methods may reduce overall costs by 35 to 40 percent. The course will take place at the 1.5-acre Rodeo Farm, which, in 2012, created 170 cubic yards of compost and diverted 20,000 pounds of waste from the landfill. Curriculum will follow the *Rodale Book of Composting* by Jerry Minnich, which includes discussion of the materials, methods, structures, equipment used in large-scale composting. The course will be offered from August to November of 2015.

The site for the value-added product and food safety course is yet to be determined. Staff are engaged in discussions with John Brophy, Sustainability Manager at City Colleges of Chicago, regarding the possibility of offering the at Kennedy King College. The course would be cross promoted between the school's agriculture and culinary programs. These efforts are well timed as Whole Foods recently announced plans to open an 18,000-square-foot store in Englewood, in 2016, anchoring a 13-acre community redevelopment site in the recognized food desert. This follows a successful launch of a Detroit Whole Foods location, where 65 percent of employees are native Detroiters, and the store offers about 150 local value-added products, such as granola and alkaline water. Restaurants, universities, and hospitals are all potential food and produce

customers for value-added products, such as jellies, jams, salsas, canned tomatoes, canned green beans, pickled onions, piccalilli, and jardinière, which students would produce in the course. The strong marriage between farming and food systems is readily apparent in Windy City Harvest certificate graduates' recent professional paths, which include positions as a Whole Foods market sales coordinator, and Uncommon Ground farm director, and the founding and ownership of the Chicago Dill Pickle Food Coop.

3. Project Results

This initiative will result in a higher level of engagement and increased learning and job training opportunities for low-income African American and Hispanic residents of Chicago's South and West sides, as well as other individuals seeking professional training and certification. Windy City Harvest's more than 20 partner agencies will benefit from access to trained workers with specialized skills and knowledge, 40,000 low-income residents will gain increased access to healthy, affordable food, and 75 to 90 students will graduate from new certificate programs that improve their qualifications for seasonal and full-time employment in Chicago's growing urban agriculture sector and local food system.

In alignment with the Garden's ten-year strategic plan, WCH has a demonstrable track record of clearly articulating and meeting or exceeding its program goals. Outcomes are based on institutional goals as defined by the strategic plan and set forth qualitative and quantitative metrics against which to measure success. Specific benchmarks of student and program achievement, including the number of applications, the number of students enrolled, class attendance, graduation rates, job placement, job retention, and student learning and engagement, are routinely updated by WCH program staff and maintained on a shared database. The primary tangible products of this project will be 5 newly piloted industry-specific curricula, 1 revised course in business and entrepreneurship for local foods, and 10 student-created business models for developing quarter-acre urban farm sites into sustainable food and farming enterprises. The program will lead to the following outcomes:

Outcome 1: Education and Training

- Recruit and hire five qualified instructors
- Attract at least 12 applicants for each certificate course
- Enroll 8 to 10 students in each certificate course. All classes will offer four credit hours, 70 contact hours, and be accredited through the Illinois Community College Board (ICCB)
- Engage 60 to 70 students in two or more experiential learning opportunities at businesses, organizations, non-profits, academic institutions, federal agencies that support local and sustainable food systems.
- 80 percent of students fulfill all course requirements and graduate with a grade of C or higher, as measured by quizzes, homework, staff observations, daily attendance, participation in partner site visits, and a final project.
- 80 percent of graduates apply their knowledge in a field related to urban agriculture or the culinary arts, whether through employment or volunteer opportunities, for a minimum of 90 days.

Outcome 2: Curricular Development

- Develop 5 evidence-based, four credit hour industry-specific curricula accredited through the Illinois Community College Board (ICCB).
- Produce 5 to 10 student-created business models for developing quarter-acre urban farm sites into sustainable food and farming enterprises. These models will include crop plans, planting calendars, seed and equipment orders, sales and harvest projections, marketing materials, and site drawings.
- Revise the business and entrepreneurship for local foods certificate course to more thoroughly align curriculum and instructional delivery with models found in the USDA's National Institute of Food and Agriculture (NIFA), Secondary Education, Two-Year Postsecondary Education, and Agriculture in the K-12 Classroom Challenge Grants Program (SPECA)

Outcome 3: Food Access

- Produce 50,000 pounds of fresh produce at the collected Windy City Harvest farm sites
- Donate 15,000 pounds of produce to serve an estimated 21,400 low-income clients (based on the USDA's estimate of .7 pounds serving one client) at Women, Infants, and Children centers, homeless shelters, human services organizations, and farmers' markets that accept federal food benefits
- Donate 10,000 pounds of produce to established partner organizations, such as the Pacific Garden Mission and Pilsen Wellness Center, serving food desert communities on Chicago's South Side
- Generate \$100,000 in revenue through sales to farmers' markets in the Pilsen and Little Village neighborhoods, community markets serving WIC clients, and fresh food wholesalers such as Midwest Foods, Dill Pickle Food Co-Op, and Green Grocer

Sustainability

Windy City Harvest is an integral and growing part of the Chicago Botanic Garden's community education programs, and the Garden has a solid track record of securing funds from private and public sources for these programs. The Garden will continue to pursue innovative partnerships in the private and public sector to maintain its urban agriculture activities, such as with FarmedHere and Green Roof Solutions, whose letters of support are included in this proposal. Since its inception, Windy City Harvest has maintained and expanded its partnerships with Daley College/AVI (since 2007) and the Cook County Sheriff's Boot Camp (since 2009). Daley College has been a key contributor to the evolution of WCH, providing classroom and production space, a greenhouse and walk-in cooler, and partnering in obtaining accreditation and WIA eligibility. Daley College also lists the WCH program in its course catalog. Recent meetings with John Brophy at Kennedy King College suggest opportunities to extend and deepen this relationship.

Under Mayor Rahm Emanuel's new plan, "Farmers for Chicago," the Chicago Botanic Garden, these collaborators, and others will turn five acres of vacant City-owned land into urban farms over the next three years, while providing job training for residents. The food produced will help fulfill existing demand for locally grown fruits and vegetables in Chicago's culinary community. Increasingly, restaurateurs and grocery stores are selling healthy, locally grown produce, and Chicago residents are seeking out these options for social, health, and environmental reasons. As a sign that such efforts have begun to reach high-need communities, Whole Foods recently announced plans to open an 18,000-square-foot store in 2016, anchoring a 13-acre community redevelopment site in Englewood. The City is prepared to give the company roughly \$10 million in tax-increment financing, according to a September report by *Time* magazine.

Yet, by themselves, these efforts are not enough to respond to Chicago's food insecurity needs and restore healthy communities in recognized food deserts, such as North Lawndale, Washington Park, and Grand Boulevard. For urban agriculture to flourish in underserved communities, the number of beginning urban farmers and entrepreneurs has to grow, along with the number of trained workers and food-system professionals who can support their enterprises and a growing local food system. As a leader in the field of horticulture and organic farming, the Garden is ready to deepen its impact through a model industry-specific certificate program that will assist beginning urban farmers in overcoming barriers to employment in the urban farming and culinary sector.