

Project Abstract

Project title: Expanding Access to Urban Growing Space and Agricultural Trainings

Hartford is a food desert with limited access to fresh, affordable food in many neighborhoods. A staggering 28.1% of Hartford residents live in poverty compared to 10.4% of Connecticut residents (TownCharts, 2021). To increase fresh food access, KNOX will expand access to growing space and agricultural trainings through our Community Garden, Urban Farming, and Environmental Education programs.

KNOX manages and maintains 21 community gardens throughout Hartford. Many gardens have unmet infrastructure needs, which limits their use. KNOX will expand access to growing space by installing water systems at 2 gardens, repairing water pipes at 1 garden, repairing the fence at 2 gardens, upgrading the greenhouse at 1 garden, replacing worn out garden beds, adding signage to all gardens, installing fencing around 10 garden plots, and purchasing a wood chipper to make woodchips for all gardens.

These infrastructure enhancements will also open up growing space for KNOX farming participants. The three-level KNOX Urban Farming Program supports a phased path on an independent farming career. Goals for farming participants can include an entrepreneurial path towards a farm business, a part-time project selling value-added products, or employment as farmers for an established agricultural business.

KNOX will partner with Gardeners to Farmers Greenhouse and Levo International to host 6 agricultural workshops annually in the newly enhanced community gardens for farming participants, community gardeners, and the wider community. The workshops and infrastructure enhancements are in response to requests from community gardeners.

Additionally, KNOX will partner with Noah Webster Micro Society Magnet School to expand agricultural education for K-5 students in the KNOX Environmental Education Program. This program currently teaches students about vegetable growing and nutritious, locally grown food. KNOX will expand upon these efforts through a series of speaking events and field trips that introduce students to careers in agriculture and innovative production.

This project will serve 300 community gardeners, 15 farming participants, 300 workshop attendees (100 per year), and 1,500 K-5 students (500 per year). Additionally, it will serve thousands of Hartford families and children by increasing access to fresh food grown in Hartford. We estimate those we serve reflect Hartford's diverse population, which includes 45% Latinx, 37% Black, 15% White, and 3% Asian residents (TownCharts, 2021). Farming participants will be underemployed Hartford residents who have been farming less than 10 years.

This project addresses the purpose of UAIP by increasing access to fresh, local food in an area where it is limited. It uses innovative urban agricultural practices, including community gardens, urban farms, and greenhouses. It provides hands-on training in farming and gardening. It also provides K-5 students with educational programming that teaches gardening, innovative production, agricultural careers, and the importance of eating nutritious, locally grown food.

UAIP Project Narrative

Project Narrative

1. Project Overview: Community and the Needs to be Addressed

Hartford is a food desert with limited access to fresh, affordable food in many neighborhoods. This is because many Hartford neighborhoods are located over one-half mile from a supermarket (USDA Economic Research Service, 2021). Another contributing factor to limited access to fresh food is that many households don't have access to a vehicle.

With this funding, KNOX will increase fresh food access in Hartford by expanding access to growing space and agricultural trainings through our Community Garden, Urban Farming, and Environmental Education programs.

KNOX manages and maintains 21 community gardens located across 10 low-to-moderate income Hartford neighborhoods, providing residents with access to growing space close to their homes. These gardens span 9.87 acres. KNOX provides regular maintenance of the community gardens, including mowing and litter removal, as well as access to seeds and compost.

Many community gardens have unmet infrastructure needs, limiting their use. KNOX will expand access to growing space by installing water systems at 2 gardens that lack water access, repairing water pipes at 1 garden, repairing fences at 2 gardens to protect produce, installing fencing around 10 plots to keep out animals, purchasing a wood chipper to improve garden maintenance, and adding signage to all 21 gardens to raise awareness of their availability. KNOX will also upgrade the greenhouse at 1 garden by installing new sidewalls, roofing, vents, and a door, and updating the flooring and heating system for increased efficiency and productivity. The greenhouse walls and door are heavily stained and cracked, and do not let in sufficient light. The greenhouse roof traps in water, and vents do not open, preventing fresh air from entering. KNOX will also replace worn out lumber garden beds with double stacked composite beds, which last 25-30 years, while the lumber KNOX currently uses lasts 3-7 years (Trex, 2022). Community gardeners have requested double stacked beds for enhanced accessibility with less bending to seed, weed, and harvest. By meeting these needs, KNOX will increase the number of community gardeners from 253 to 300 annually, increasing fresh food access for Hartford families.

Meeting community garden infrastructure needs will also open up growing space for KNOX's 15 farming participants, specifically for levels 2 and 3 participants to make progress on their personal farm-based business growth. The three-level Urban Farming Program supports a phased path on an independent farming career. Goals for participants can include an entrepreneurial path towards a farm business, a part-time project selling value-added products, or employment as farmers for an established farm business. KNOX provides access to growing space, water, agricultural education, and training with experts in various growing techniques. Participants sell their produce to local organizations, including Hartford Public Schools Lunch Program.

This funding will also expand agricultural education for approximately 500 K-5 students annually in the KNOX Environmental Education Program. Typically, students learn about vegetable growing and the importance of eating nutritious, locally grown food, including

produce farming participants provide for school lunches. KNOX will expand upon these efforts through a series of speaking events and field trips that introduce students to careers in agriculture and innovative production. Students will meet farming participants and learn about their local food system as well as emerging and traditional urban agricultural practices.

In addition to K-5 students, KNOX will provide agricultural trainings for farming participants, community gardeners, and the wider community. Each year, KNOX will host 6 agricultural workshops in the newly enhanced community gardens that engage at least 100 attendees.

This project will serve Hartford, Connecticut. The population is 120,576 (United States Census Bureau, 2021). A staggering 28.1% of Hartford residents live in poverty compared to 10.4% of Connecticut residents (TownCharts, 2021). Hartford's median household income is \$36,278 compared to \$78,833 in Connecticut, and 16.3% of families have no one working. Hartford City Plan (2020) and Hartford Climate Action Plan (2020) emphasize the need to improve the local food economy through urban agriculture. City of Hartford Advisory Commission on Food Policy (2020) also recommends the use of urban agriculture to increase access to fresh, local food.

Target areas are low-income and low food access census tracts. 18 community gardens are in low-income tracts (FFIEC, 2020). 5 community gardens are also in low food access tracts, and 5 are in Qualified Opportunity Zones (USDA Economic Research Service, 2021; LISC, 2019). In Earle Garden's tract, 34.7% of households don't have vehicles and are over one-half mile from a supermarket (USDA Economic Research Service, 2021). Noah Webster Micro Society Magnet School is also in a low-income and low food access tract.

This project will serve 300 community gardeners, 15 farming participants, 300 workshop attendees (100 per year), and 1,500 K-5 students (500 per year). It will also serve thousands of Hartford families and children by increasing access to fresh food grown by community gardeners and farming participants. As a 2021 Fall Quest Task Force Survey of KNOX community gardeners found, 65% share produce, 57% grow for primary use, and 34% donate produce. We estimate those we serve reflect Hartford's population, which includes 45% Latinx, 37% Black, 15% White, and 3% Asian (TownCharts, 2021). Based on current garden plot renewals, we anticipate most community gardeners will renew their garden plots each year. Farming participants will be underemployed Hartford residents who have been farming less than 10 years

This project addresses the purpose of UAIP by increasing access to fresh, local food in an area where fresh food is limited. It uses innovative urban agricultural practices, including community gardens, urban farms, and greenhouses. It provides land to beginning farmers to support farm businesses. It serves multiple farmers and gardeners with hands-on training in farming and gardening at a nonprofit farm and community gardens. It provides K-5 students with educational programming that increases access to fresh food, and teaches gardening, innovative production, agricultural careers, and the importance of eating locally grown food.

This project meets UAIP priorities of equity, environmental justice, and climate. It will serve historically underserved groups, including socially disadvantaged producers and beginning farmers who have been farming less than 10 years. Based on previous and current demographics, we anticipate the majority of farming participants and community gardeners will be Black or

Latinx, and 50% will be women. This project will also promote environmental justice by addressing inadequate access to fresh food, providing access to community gardens that promote health, and teaching sustainable agricultural practices that reduce pollution. Hartford has high risk of lead paint exposure and lung cancer compared to surrounding areas, and many Hartford neighborhoods have asthma rates up to 13.5% (DataHaven, 2021).

This project has the potential to mitigate the impacts caused by climate change. By increasing access to locally grown food, this project will reduce the distance food travels, which will decrease air pollution from food transportation. Alarmingly, fruits and vegetables travel 1,500 miles on average to reach consumers, burning about 500 gallons of diesel fuel per trip (South University, 2016). To further mitigate climate change impacts, KNOX prohibits use of petroleum-based fertilizers and pesticides in the community gardens, farm plots, and school gardens. The agricultural workshops KNOX hosts will include topics on organic and sustainable farming practices, such as companion planting and legacy crops.

2. Project Goals and Intended Outcomes:

This project will address the limited availability of fresh, locally grown food in Hartford. KNOX will complete all outcomes annually by [REDACTED].

Goal 1: Expand access to growing space for farming participants and community gardeners by meeting the infrastructure needs in KNOX's 21 community gardens.

Objective 1.1: By [REDACTED], KNOX Crew will install water systems at Dart and Winter Green gardens and repair water pipes at Laurel Garden.

Objective 1.2: By [REDACTED], KNOX will hire a contractor to install sidewalls, roofing, vents, and a door, and update the flooring and heating at Battles Garden's greenhouse.

Objective 1.3: By [REDACTED], KNOX will hire a contractor to repair the fences at Enfield and Good Shepherd gardens.

Objective 1.4: By [REDACTED], KNOX will purchase a wood chipper to make woodchips for use in all 21 community gardens.

Objective 1.5: By [REDACTED], KNOX will install signage at all 21 community gardens.

Objective 1.6: By [REDACTED], KNOX will install fencing around 10 garden plots.

Objective 1.7: Each year by [REDACTED], KNOX will replace up to 36 worn out raised garden beds.

The following outcome is tied to the above objectives:

- Each year, 300 community gardeners and 15 farming participants will grow food in community gardens.

Goal 2: Deliver high-quality agricultural training opportunities to farming participants, community gardeners, and the wider community.

Objective 2.1: Each year by [REDACTED], KNOX will host 6 agricultural workshops, including companion planting and legacy crops, in community gardens for farming participants, community gardeners, and the wider community.

Outcomes:

- Each year, at least 100 attendees will participate in agricultural workshops.
- Each year, 90% of workshop attendees will gain knowledge in an agricultural topic, such as companion planting and legacy crops.

Goal 3: Deliver hands-on lessons to K-5 students on agricultural careers, innovative urban farming techniques, vegetable growing, and the importance of nutritious, locally grown food.

Objective 3.1: Each year by [REDACTED], KNOX will teach 10 lessons to K-5 students about growing vegetables and the importance of eating locally grown food.

Outcomes:

- Each year, 500 K-5 students and least 5 teachers will attend lessons on vegetable growing and the importance of eating locally grown food.
- Each year, 80% of K-5 students' teachers will learn a tool or agricultural touchpoint to implement in their classroom, such as seed planting or harvesting produce.

Objective 3.2: Each year by [REDACTED], KNOX will hold 2 field trips to KNOX and engage 4 farming participants as guest speakers to share with K-5 students about agricultural careers and innovative urban farming techniques.

Outcomes:

- Each year, 500 K-5 students will connect with farming participants about agricultural careers and innovative urban farming techniques.
- Each year, 80% of K-5 students engaged will complete at least 3 agricultural touchpoints, such as an interaction with a farmer, trying new produce, or planting a seed.

Project beneficiaries include the 300 community gardeners and 15 farming participants who will have access each year to enhanced growing space in community gardens, and the consumers of their produce. 300 workshop attendees (100 per year) will benefit from agricultural workshops. 1,500 K-5 students (500 per year) will benefit from agricultural education.

KNOX will review the project annually with partners and participants for insights and input. We selected the community garden infrastructure enhancements based on feedback from community gardeners. We will select agricultural workshop topics based on input from community gardeners and farming participants, and collect feedback from workshop attendees.

KNOX will engage 3 partners in developing project objectives and implementing results. Noah Webster Micro Society Magnet School will provide space and K-5 students for agricultural education and help coordinate field trips to KNOX. Levo International will teach one agricultural workshop per year for 3 years. Gardeners to Farmers Greenhouse will help coordinate local farmers in teaching at least one agricultural workshop per year for 3 years.

3. The Organizations and Partners Involved:

KNOX has a longstanding commitment to and direct involvement with UAIP priorities. We have expertise and experience training beginning farmers in urban agriculture, including traditional and innovative production, for 7 years through our Urban Farming Program. This has increased access to locally grown food in a city with limited fresh food access. Since 1966, KNOX has partnered with state and local governments to promote healthy living and keep Hartford greener.

KNOX has decades of successful project management experience. We have created, managed, and maintained community gardens in Hartford for over 50 years, and increased the number of community gardeners by 38% since 2019. We have provided garden education to 758 students to date in 2022, including hands-on gardening lessons. In the past 3 years, KNOX has provided 21 farming participants with agricultural skills, including 5 who created farm businesses in 2022.

KNOX is strongly connected to the Hartford community. KNOX engages hundreds of volunteers through farm and community garden projects, tree plantings, and litter cleanups annually. There are 253 families currently growing food in KNOX community gardens. We regularly seek and receive feedback from members of the Hartford community to improve upon our programming.

KNOX Community Garden Coordinator [REDACTED] will lead the infrastructure needs of the community gardens. She will schedule contractors, track garden plot usage, provide outreach on garden plot availability, coordinate with Gardeners to Farmers Greenhouse to schedule agricultural workshops, and ensure community gardens obtain woodchips and new raised garden beds as needed. She is an experienced gardener who has worked in Hartford for many years.

KNOX Volunteer and Education Manager [REDACTED] will coordinate agricultural education for K-5 students, including coordinating student field trips and engaging farming participants as guest speakers. She leads KNOX's Environmental Education and Volunteer programs. She has 6 years of experience teaching environmental education, including 3 years of farm-based education. She has taught pre-K-5 students and adults about food systems in both rural and urban nonprofits, including [REDACTED], [REDACTED], and [REDACTED]. She was Community Garden Coordinator for [REDACTED], providing hands-on instruction and facilitating workshops for beginning gardeners. She has developed ongoing nature education series' for municipalities. She has a Bachelor of Arts in Human Development and Family Services. She has attended professional development trainings through Cornell University and Eastern Region Association of Forest and Nature Schools, and has completed several Master Gardener and Master Naturalist trainings.

KNOX Urban Farming Manager [REDACTED] will invite farming participants to agricultural workshops, and coordinate levels 2 and 3 participants' growing space and produce sales. He is actively involved with Hartford Farmers Market Development Group and Food Policy Commission. Prior to KNOX, he was Business Development Manager at [REDACTED] Nursery and Sales Representative at [REDACTED] Nurseries and [REDACTED] Nurseries. He has an Associates in Horticulture from [REDACTED].

KNOX Director of Programs [REDACTED] will oversee project implementation and deliverables to ensure goals and objectives are met according to the grant timeline. From 2012 to 2019, she was Unit Director of [REDACTED], where she managed program planning, operation, evaluation, budget oversight, and grant deliverables. From 2012 to 2017, she was Equity, Diversity, Inclusion Educator at [REDACTED], where she facilitated workshops, assemblies, and teacher trainings for equitable, diverse, and inclusive environments. She has a Bachelor of Arts in Child and Youth Development from [REDACTED] and a Middle Management Certification from [REDACTED].

KNOX Director of Advancement and Marketing [REDACTED] will lead project marketing efforts, including developing and installing community garden signage and promoting agricultural workshops on KNOX's social media, website, emails, and newsletter. She leads KNOX's marketing and fundraising efforts, sharing KNOX's story with Greater Hartford residents. Since 2008, she has been a founder and board member at [REDACTED]. From 2013 to 2017, she was Associate Director at [REDACTED].

She managed fundraising, special events, public relations, and marketing. She completed the Executive Leadership Program for Nonprofit Cultural Organizations at [REDACTED].

KNOX Crew Members [REDACTED] and [REDACTED] will build and install garden beds, repair water pipes at Laurel Garden, install water systems at Dart and Winter Green gardens, install garden signage and fencing around plots, and lay woodchips at all gardens. They have completed community garden and landscaping projects as KNOX Crew Members for over 10 years.

KNOX will partner with Noah Webster Micro Society Magnet School, Levo International, and Gardeners to Farmers Greenhouse on this project. Noah Webster Micro Society Magnet School is connected to hundreds of Hartford students and families. KNOX has partnered with Noah Webster Micro Society Magnet School for over 5 years to provide environmental education to students. For this project, Noah Webster Micro Society Magnet School will provide K-5 students and space for KNOX to provide agricultural lessons, and coordinate with KNOX Volunteer and Education Manager to organize field trips to KNOX. KNOX will leverage the school gardens at Noah Webster Micro Society Magnet School to teach students to garden. We will also leverage KNOX's farm as the field trip location as it is equipped with 4 hydroponic systems, 4 greenhouses (5,750 square foot, 2,969 square foot, 2,314 square foot, and 1,162 square foot), and a one-quarter acre farm to show students. The contact at Noah Webster Micro Society Magnet School is [REDACTED].

Levo International will teach one agricultural workshop per year of the 3-year grant period in coordination with KNOX Community Garden Coordinator. Levo International will provide all necessary workshop supplies. KNOX will leverage our community garden space to host the workshops. Levo International provides food security solutions, including engaging Hartford residents in growing food with hydroponic systems at home, which they later sell. The contact is [REDACTED].

Gardeners to Farmers Greenhouse will coordinate at least one workshop per year of the 3-year grant period. Gardeners to Farmers Greenhouse has provided Hartford families with raised garden beds in their homes to grow food. This farm business is owned by [REDACTED], a Level 2 farming participant, who can be reached at [REDACTED].

4. Workplan and Activities to Achieve the Goals:

As Hartford is a food desert with limited access to fresh food, expanding food production is vital. Farming participants and community gardeners face barriers to expanding food production due to limited access to growing space. To fill this need, our project goals include expanding access to growing space for farming participants and community gardeners by meeting infrastructure needs of KNOX's 21 community gardens. To meet this goal, we included objectives of installing water systems at Dart and Winter Green gardens, repairing water pipes at Laurel Garden, repairing the fences at Enfield and Good Shepherd gardens, and providing upgrades to Battles Garden's greenhouse. Community gardeners requested these enhancements.

To further expand food production, we've included the goal of delivering agricultural training opportunities to farming participants, community gardeners, and the wider community. To meet this goal, we've included the objective of hosting 6 agricultural workshops in the newly

enhanced community gardens. These workshops are in direct response to feedback from community gardeners. In a Fall 2021 Quest Task Force Survey of KNOX community gardeners, 28% requested training and skill-building sessions on growing techniques.

We've also included the goal of delivering lessons to K-5 students on agricultural careers, gardening, innovative urban farming techniques, and the importance of eating nutritious, locally grown food. To meet this goal, we've included the objectives of teaching K-5 students about growing vegetables and the importance of eating locally grown food, hosting 2 field trips at KNOX, and engaging 4 farming participants as guest speakers to share with K-5 students about agricultural careers and innovative urban farming techniques.

Project Timeline:

This project will take place from January 30, 2023 to January 29, 2026.

January 30, 2023 - [REDACTED]: KNOX Crew will install water systems at Dart and Winter Green gardens and repair water pipes at Laurel Garden.

- Progress indicators: Installing water systems, purchasing supplies to repair water pipes, and updating community gardeners about work to be completed.

April 2023 - [REDACTED]: KNOX Advancement and Marketing Director will develop and coordinate new signage at all 21 community gardens.

- Progress indicators: Coordinating with contractor to create signage, and coordinating with KNOX Crew to install signage.

July 2023 - [REDACTED]: KNOX Community Garden Coordinator will orchestrate the hiring of a contractor to provide upgrades to the greenhouse at Battles Garden.

- Progress indicators: Scheduling a contractor to provide greenhouse upgrades, and updating community gardeners about work to be completed.

August 2023 - [REDACTED]: KNOX Community Garden Coordinator will orchestrate the hiring of a contractor to repair the fences at Enfield and Good Shepherd gardens.

- Progress indicators: Scheduling a contractor to repair the fences, and updating community gardeners about work to be completed.

October 2023 - [REDACTED]: KNOX Crew will install fencing around 10 garden plots.

- Progress indicators: Purchasing fencing and fence poles and installing fencing.

The following will take place annually each year of the grant period:

January - [REDACTED]: KNOX Volunteer and Education Manager will coordinate the teaching of K-5 students about growing vegetables and the importance of eating locally grown food.

- Progress indicators: Coordinating with Noah Webster Micro Society Magnet School to schedule lessons and teaching lessons.

March - [REDACTED]: KNOX Volunteer and Education Manager will engage 4 farming participants as K-5 student guest speakers on agricultural careers and innovative urban farming techniques.

- Progress indicators: Scheduling speaking events with farming participants.

March - [REDACTED]: KNOX Volunteer and Education Manager will schedule 2 field trips to KNOX for K-5 students.

- Progress indicators: Scheduling field trips and coordinating with farming participants

March - [REDACTED]: KNOX Community Garden Coordinator will organize the replacement of up to 36 raised garden beds with new ones as needed.

- Progress indicators: Tracking garden beds that need replacement, purchasing materials to build garden beds, and coordinating with KNOX Crew to build and install garden beds.

March - [REDACTED]: KNOX Community Garden Coordinator will coordinate the addition of woodchips to all 21 community gardens to ensure they receive free woodchips as needed.

- Progress indicators: Tracking community gardens that need woodchips and scheduling with KNOX Crew to lay out woodchips.

March - [REDACTED]: Community gardeners and farming participants will grow food in KNOX community gardens.

- Progress indicators: Filling out garden plot applications and coordinating with KNOX Community Garden Coordinator on garden plot availability.

April - [REDACTED]: KNOX Community Garden Coordinator will coordinate with Levo International to teach agricultural workshops in community gardens, and work with Gardeners to Farmers Greenhouse to select and coordinate with 5 other workshop leaders. KNOX Director of Advancement and Marketing will promote the workshops.

- Progress indicators: Contacting potential workshop leaders, scheduling workshops, and promoting workshops.

We will communicate findings and results through KNOX's annual report, newsletter, and social media, reaching over 5,000 people. We will prepare annual project reports and share an overview of project activities and outcomes with evaluators, researchers, practitioners, and other interested parties. We will meet with interested parties to discuss the project and how to replicate it.

KNOX has the fiscal accountability and financial management experience to manage a grant of this magnitude. KNOX managed the financial, programmatic, and reporting of the following grants successfully: 12 consecutive years with Corporation and National Community Service for \$120,000 to \$190,000 per year for our AmeriCorps Green Crew program; \$125,160 U.S. Forest NE State and Private Forestry grant in 2016. We have also recently completed and successfully reported on Year 1 of a \$210,000 grant over 3 years from [REDACTED]. KNOX is audited annually, and auditors meet with the Finance Committee and Board of Directors. KNOX holds quarterly program budget reviews to ensure fiscal accountability. KNOX's purchasing and accounting policy is that staff submit expense requests to KNOX Director of Programs prior to all purchases. KNOX Director of Programs ensures expense requests align with any grant requirements prior to signing off for approval. Staff submit receipts for all purchases, which KNOX Director of Programs and Accounting Resources, Inc. document.

Evaluation:

KNOX will evaluate success based on if we meet the following by the end of the grant period:

Objectives:

- By [REDACTED], KNOX Crew will install water systems at Dart and Winter Green gardens and repair water pipes at Laurel Garden.
- By [REDACTED], KNOX will hire a contractor to install sidewalls, roofing, vents, and a door, and update the flooring and heating at Battles Garden's greenhouse.
- By [REDACTED], KNOX will hire a contractor to repair the fences at Enfield and Good Shepherd gardens.
- By [REDACTED], KNOX will purchase a wood chipper to make woodchips for use in all 21 community gardens.
- By [REDACTED], KNOX will install signage at all 21 community gardens.
- By [REDACTED], KNOX will install fencing around 10 garden plots.
- Each year by [REDACTED], KNOX will replace up to 36 worn out raised garden beds.
- Each year by [REDACTED], KNOX will host 6 agricultural workshops, including companion planting and legacy crops, in community gardens for farming participants, community gardeners, and the wider community.
- Each year by [REDACTED], KNOX will teach 10 lessons to K-5 students about growing vegetables and the importance of eating locally grown food.
- Each year by [REDACTED], KNOX will hold 2 field trips to KNOX and engage 4 farming participants as guest speakers to share with K-5 students about agricultural careers and innovative urban farming techniques.

Annual outcomes by [REDACTED]:

- 300 community gardeners and 15 farming participants will grow food in community gardens.
- At least 100 attendees will participate in agricultural workshops.
- 90% of workshop attendees will gain knowledge in an agricultural topic, such as companion planting and legacy crops.
- 500 K-5 students and least 5 teachers will attend lessons on vegetable growing and the importance of eating locally grown food.
- 80% of K-5 students' teachers will learn a tool or agricultural touchpoint to implement in their classroom, such as seed planting or harvesting produce.
- 500 K-5 students will connect with farming participants about agricultural careers and innovative urban farming techniques.
- 80% of K-5 students engaged will complete at least 3 agricultural touchpoints, such as an interaction with a farmer, trying new produce, or planting a seed.

KNOX Community Garden Coordinator and KNOX Volunteer and Education Manager will evaluate outcomes and objectives with support from KNOX Director of Programs, and will use this data to improve programming. KNOX Director of Programs has 7 years of experience managing program evaluation at [REDACTED]. KNOX Volunteer and Education Manager has tracked nonprofit educational outcomes for 6 years. KNOX Community Garden Coordinator has collected Community Garden Program outcomes for 2 years.

KNOX Community Garden Coordinator will track the number of community gardeners and farming participants growing food in community gardens, workshops held in community gardens, and attendees at each workshop. She will provide feedback surveys to workshop

attendees to track those who gained knowledge in agricultural topics covered. She will document this information monthly to determine if KNOX is on track to meeting anticipated outcomes. She will track that all community garden infrastructure enhancements are completed.

KNOX Volunteer and Education Manager will track the number of K-5 students and teachers who attend lessons on vegetable growing, locally grown food, agricultural careers, and innovative urban farming techniques. She will track the number of farming participants engaged as guest speakers, field trips to KNOX, and students who interact with a farmer, try new produce, or plant seeds. She will provide feedback surveys to teachers to track those who learn a tool or agricultural touchpoint to implement. She will measure progress based on delivery of lessons.

Self-Sustainability:

After federal funding has ended, KNOX will not need additional funding to provide water systems, fence repair, greenhouse upgrades, or a wood chipper, as these are one-time expenses. The Trex composite garden beds will significantly lower maintenance needs as they last up to 10 times longer than the lumber beds KNOX currently uses. As community gardeners and farming participants will grow food in the community gardens for years to come, this project will impact Hartford well beyond the grant period. This project will provide KNOX with the framework to continue agricultural workshops and K-5 agricultural education beyond the grant period. This project will advance UAIP goals of developing urban agriculture and innovative production activities in an urban area with limited fresh food access. Farming participants will continue to sell produce to local organizations using knowledge they learned.

Potential funding sources to support continuation of this project after the grant period are Connecticut Department of Agriculture (\$19,300), Farm Aid (\$7,500), Gawlicki Family Foundation (\$75,000 over 3 years), Hartford Foundation for Public Giving (\$16,290), William Caspar Graustein Memorial Fund (\$2,500), Farm Credit Northeast AgEnhancement (\$5,000), Price Chopper (\$500), Red Sox Foundation (\$1,000), Robert F. Schumann Foundation (\$210,000 over 3 years), ShopRite (\$2,000), State Farm (\$8,000), TD Charitable Foundation (\$5,000), and Walmart Foundation (\$1,000), from all of which we have recently received funding at the listed amounts to support the Community Garden, Urban Farming, and Environmental Education programs. KNOX also has deep corporate relationships from which we will continue to seek funding. KNOX charges \$20 to \$30 per community garden plot to support the program. KNOX will also offer agricultural workshops to non-Hartford residents for a fee to help cover costs.

KNOX partnerships promote sustainability of our programs overall. Hands on Hartford provides commercial kitchen access, Farm Credit East and reSET provide business trainings, and Micro2Life and Red, Green, and Gold LLC provide innovative urban farming trainings to farming participants. Foodshare, Hartford Healthcare's Food FARMacy Program, Hartford Public Schools Lunch Program, and Levo International purchase farming participants' produce. The City of Hartford owns the properties for several community gardens and provides KNOX these spaces for free. Hands on Hartford and Boys & Girls Club teach children to grow food in community gardens. Friends of Pope Park helps maintain school gardens. KNOX partners with several Hartford schools, including Noah Webster Micro Society Magnet School, to provide students and space for Environmental Education Program lessons, and Boys & Girls Club, ConnectiKids, and Compass Youth Collaborative teach the program to their students.

Table 1: Measurements of Milestones

Metric	Annual Milestone	Month Milestone Completed Annually	Total Completed by December Annually
Participation in KNOX Community Garden Program	200 community gardeners	March	300 community gardeners
Farming participants' use of community gardens	10 farming participants	March	15 farming participants
Community attendance at agricultural workshops	50 attendees, 3 workshops	June	100 attendees, 6 workshops
K-5 students' attendance at lessons on vegetable growing and locally grown food	250 students, 4 lessons	June	500 students, 8 lessons
K-5 students' attendance at guest speaking events and field trips on agricultural careers and innovative urban farming techniques	250 students, 2 guest speaking events, 1 field trip	June	500 students, 4 guest speaking events, 2 field trips

BUDGET INFORMATION - Non-Construction Programs

OMB Number: 4040-0006
Expiration Date: 02/28/2025

SECTION A - BUDGET SUMMARY

Grant Program Function or Activity (a)	Catalog of Federal Domestic Assistance Number (b)	Estimated Unobligated Funds		New or Revised Budget		
		Federal (c)	Non-Federal (d)	Federal (e)	Non-Federal (f)	Total (g)
1. Federal	10.935	\$	\$	\$ 296,908.62	\$ 0.00	\$ 296,908.62
2. Non-Federal	10.935				0.00	0.00
3.						
4.						
5. Totals		\$	\$	\$ 296,908.62	\$ 0.00	\$ 296,908.62

SECTION B - BUDGET CATEGORIES

6. Object Class Categories	GRANT PROGRAM, FUNCTION OR ACTIVITY				Total (5)
	(1) Federal	(2) Non-Federal	(3)	(4)	
a. Personnel	\$ 112,339.50	\$ 0.00	\$	\$	\$ 112,339.50
b. Fringe Benefits	20,221.11	0.00			20,221.11
c. Travel	0.00	0.00			0.00
d. Equipment	0.00	0.00			0.00
e. Supplies	51,338.13	0.00			51,338.13
f. Contractual	92,120.00	0.00			92,120.00
g. Construction	0.00	0.00			0.00
h. Other	0.00	0.00			0.00
i. Total Direct Charges (sum of 6a-6h)	276,018.74	0.00			\$ 276,018.74
j. Indirect Charges	20,889.88	0.00			\$ 20,889.88
k. TOTALS (sum of 6i and 6j)	\$ 296,908.62	\$ 0.00	\$	\$	\$ 296,908.62
7. Program Income	\$ 0.00	\$ 0.00	\$	\$	\$ 0.00

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Standard Form 424A (Rev. 7- 97)
Prescribed by OMB (Circular A -102) Page 1A

SECTION C - NON-FEDERAL RESOURCES

(a) Grant Program		(b) Applicant	(c) State	(d) Other Sources	(e)TOTALS
8.	Federal	\$ <input type="text"/>	\$ <input type="text"/>	\$ <input type="text"/>	\$ <input type="text"/>
9.	Non-Federal	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
10.	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
11.	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
12. TOTAL (sum of lines 8-11)		\$ <input type="text"/>	\$ <input type="text"/>	\$ <input type="text"/>	\$ <input type="text"/>

SECTION D - FORECASTED CASH NEEDS

	Total for 1st Year	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
13. Federal	\$ <input type="text"/>				
14. Non-Federal	\$ <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
15. TOTAL (sum of lines 13 and 14)	\$ <input type="text"/>				

SECTION E - BUDGET ESTIMATES OF FEDERAL FUNDS NEEDED FOR BALANCE OF THE PROJECT

(a) Grant Program		FUTURE FUNDING PERIODS (YEARS)			
		(b)First	(c) Second	(d) Third	(e) Fourth
16.	Federal	\$ <input type="text"/>	\$ <input type="text"/>	\$ <input type="text"/>	\$ <input type="text"/>
17.	Non-Federal	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
18.	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
19.	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
20. TOTAL (sum of lines 16 - 19)		\$ <input type="text"/>	\$ <input type="text"/>	\$ <input type="text"/>	\$ <input type="text"/>

SECTION F - OTHER BUDGET INFORMATION

21. Direct Charges: <input type="text"/>	22. Indirect Charges: <input type="text"/>
23. Remarks: <input type="text"/>	



Budget Narrative

We request the same budget for all three years of the grant period, with the exception of the supplies and contractual expenses associated with community garden infrastructure enhancements, which will only be in Year 1.

A. Personnel

- **Total UAIP Funds Requested for Personnel: \$112,339.50**
(\$37,446.50/year x 3 years)

1. [REDACTED] (KNOX Community Garden Coordinator)

Community Garden Coordinator will spend 25% of her time on this project. She will schedule contractors to meet community garden infrastructure needs, ensure community gardens receive woodchips and new garden beds as needed, provide community outreach on garden plot availability, schedule agricultural workshops, track garden plot usage, and track agricultural workshop attendance and feedback.

KNOX Community Garden Coordinator Salary:

- Project Duration: 12 months per year for 3 years.
- Community Garden Coordinator at 25% of total \$ [REDACTED] annual salary (approximately \$ [REDACTED]/hour) x 3 years = \$ [REDACTED]
- UAIP Funds Requested: \$ [REDACTED] (\$ [REDACTED]/year x 3 years)

2. [REDACTED] (KNOX Volunteer and Education Manager)

Volunteer and Education Manager will spend 20% of her time on this project. She will lead the agricultural education portion of this project for K-5 students, coordinate field trips to KNOX, coordinate with farming participants in guest speaking to students, and track the number of students who attend each lesson, teachers who learn a tool or agricultural touchpoint, and students who complete agricultural touchpoints.

KNOX Volunteer and Education Manager Salary:

- Project Duration: 12 months per year for 3 years.
- Volunteer and Education Manager at 20% of total \$ [REDACTED] annual salary (approximately \$ [REDACTED]/hour) x 3 years = \$ [REDACTED]
- UAIP Funds Requested: \$ [REDACTED] (\$ [REDACTED]/year x 3 years)

3. [REDACTED] (KNOX Director of Programs)

Director of Programs will spend 10% of her time on this project. She will oversee project deliverables to ensure goals and objectives are met according to the grant timeline. She will work with KNOX Community Garden Coordinator, KNOX Volunteer and Education Manager, and KNOX Urban Farming Manager to oversee project implementation.

KNOX Director of Programs Salary:

- Project Duration: 12 months per year for 3 years.
- Director of Programs at 10% of total \$ [REDACTED] annual salary (approximately \$ [REDACTED]/hour) x 3 years = \$ [REDACTED]
- UAIP Funds Requested: \$ [REDACTED] (\$ [REDACTED]/year x 3 years)

4. [REDACTED] (KNOX Urban Farming Manager)

Urban Farming Manager will spend 5% of his time on this project. He will invite farming participants to attend agricultural workshops, and coordinate farming participants' growing space and produce sales.

KNOX Urban Farming Manager Salary:

- Project Duration: 12 months per year for 3 years.
- Urban Farming Manager at 5% of total \$ [REDACTED] annual salary (approximately \$ [REDACTED]/hour) x 3 years = \$ [REDACTED]
- UAIP Funds Requested: \$ [REDACTED] (\$ [REDACTED]/year x 3 years)

5. [REDACTED] (KNOX Director of Advancement and Marketing)

Director of Advancement and Marketing will spend 5% of her time on this project. She will lead marketing efforts for this project, including purchasing the signage for the community gardens and promoting agricultural workshops through KNOX's social media, website, emails, and newsletter.

KNOX Director of Advancement and Marketing Salary:

- Project Duration: 12 months per year for 3 years.
- Director of Advancement and Marketing at 5% of total \$ [REDACTED] annual salary (approximately \$ [REDACTED]/hour) x 3 years = \$ [REDACTED]
- UAIP Funds Requested: \$ [REDACTED] (\$ [REDACTED]/year x 3 years)

6. [REDACTED] (KNOX Crew Member 1)

KNOX Crew Member 1 will spend 5% of his time on this project. Along with KNOX Crew Member 2, he will build and install garden bed replacements, repair water pipes at Laurel Garden, lay woodchips at all gardens, install water systems at Dart and Winter Green gardens, and install garden signage and fencing around plots.

KNOX Crew Member 1 Salary:

- Project Duration: 12 months per year for 3 years.
- KNOX Crew Member 1 at 5% of total \$ [REDACTED] annual salary (approximately \$ [REDACTED]/hour) x 3 years = \$ [REDACTED]
- UAIP Funds Requested: \$ [REDACTED] (\$ [REDACTED]/year x 3 years)

7. [REDACTED] (KNOX Crew Member 2)

KNOX Crew Member 2 will spend 5% of his time on this project. Along with KNOX Crew Member 1, he will build and install garden bed replacements, repair water pipes at Laurel Garden, lay woodchips at all gardens, install water systems at Dart



and Winter Green gardens, and install garden signage and fencing around plots.

KNOX Crew Member 2 Salary:

- Project Duration: 12 months per year for 3 years.
- KNOX Crew Member 2 at 5% of total \$ [REDACTED] annual salary (approximately \$ [REDACTED]/hour) x 3 years = \$ [REDACTED]
- UAIP Funds Requested: \$ [REDACTED] (\$ [REDACTED]/year x 3 years)

B. Fringe Benefits

Total UAIP Funds Requested for Fringe Benefits: \$20,221.11 (\$6,740.37/year x 3 years)

- KNOX uses a fringe rate of 18% of salaries and wages.

1. KNOX Community Garden Coordinator Fringe

- Community Garden Coordinator at 25% of total \$ [REDACTED] annual fringe benefits x 3 years = \$ [REDACTED]
- UAIP Funds Requested: \$ [REDACTED] (\$ [REDACTED]/year x 3 years)

2. KNOX Volunteer and Education Manager Fringe

- Volunteer and Education Manager at 20% of total \$ [REDACTED] annual fringe benefits x 3 years = \$ [REDACTED]
- UAIP Funds Requested: \$ [REDACTED] (\$ [REDACTED]/year x 3 years)

3. KNOX Director of Programs Fringe:

- Director of Programs at 10% of total \$ [REDACTED] annual fringe benefits x 3 years = \$ [REDACTED]
- UAIP Funds Requested: \$ [REDACTED] (\$ [REDACTED]/year x 3 years)

4. KNOX Urban Farming Manager Fringe:

- Urban Farming Manager at 5% of total \$ [REDACTED] annual fringe benefits x 3 years = \$ [REDACTED]
- UAIP Funds Requested: \$ [REDACTED] (\$ [REDACTED]/year x 3 years)

5. KNOX Director of Advancement and Marketing Fringe:

- Director of Advancement and Marketing at 5% of total \$ [REDACTED] annual fringe benefits x 3 years = \$ [REDACTED]
- UAIP Funds Requested: \$ [REDACTED] (\$ [REDACTED]/year x 3 years)

6. KNOX Crew Member 1 Fringe:

- Director of Advancement and Marketing at 5% of total \$ [REDACTED] annual fringe benefits x 3 years = \$ [REDACTED]
- UAIP Funds Requested: \$ [REDACTED] (\$ [REDACTED]/year x 3 years)

7. KNOX Crew Member 2 Fringe:



- Director of Advancement and Marketing at 5% of total \$ [REDACTED] annual fringe benefits x 3 years = \$ [REDACTED]
- UAIP Funds Requested: \$ [REDACTED] (\$ [REDACTED]/year x 3 years)

C. Travel – N/A

D. Equipment – N/A

E. Supplies

- **Total UAIP Funds Requested for Supplies: \$51,338.13** (\$24,122.13 in Year 1 + \$13,608 in Year 2 + \$13,608 in Year 3)

Annually for Years 1, 2, and 3: \$13,608

- \$13,608 – Trex composite materials to build raised garden beds
 - This will help meet Objective 1.7 to replace up to 36 worn out raised garden beds.
 - Cost per unit: \$378
 - Number of units: 36 per year
 - When will acquire: April each year of the grant period
 - Funds requested: \$40,824 (\$13,608 per year x 3 years)

Year 1 Only: \$10,514.13

- \$1,800 – Supplies to repair pipes at Laurel Garden
 - This will help meet Objective 1.1 to install water systems at Dart and Winter Green gardens and repair water pipes at Laurel Garden.
 - When will acquire: April 2023
 - \$600 – ¾ inch Pex pipe
 - Cost per unit: \$60 per 100 feet of pipe
 - Number of units: 1,000 feet of pipe
 - \$700 – Irrigation heads
 - Cost per unit: \$35
 - Number of units: 20
 - \$500 – Glue and fittings for pipes
 - Cost per unit: \$50 per 100 feet of pipe
 - Number of units: 10
- \$2,754.14 – Supplies for water tanks for Dart and Winter Green gardens
 - This will help meet Objective 1.1 to install water systems at Dart and Winter Green gardens and repair water pipes at Laurel Garden.
 - When will acquire: April 2023
 - \$999.98 – (2) 330 gallon water tanks
 - Cost per unit: \$499.99
 - Number of units: 2
 - \$319.96 – (4) 100-foot hoses for water tanks

- Cost per unit: \$79.99
 - Number of units: 4
 - \$1,327.64 – (2) Steel water tank stands
 - Cost per unit: \$663.82
 - Number of units: 2
 - \$106.56 – (12) Patio stones for water tanks
 - Cost per unit: \$8.88
 - Number of units: 12
- \$2,719.99 – Wood chipper
 - This will help meet Objective 1.4 to purchase a wood chipper to make woodchips for the community gardens.
 - Cost per unit: \$2,719.99
 - Number of units: 1
 - When will acquire: November 2023
- \$3,240 – Garden plot fencing
 - This will help meet Objective 1.6 to install fencing around 10 plots.
 - When will acquire: November 2023
 - \$3,200 – Rows of metal fencing
 - Cost per unit: \$80
 - Number of units: 40 rows of 6-foot metal fencing (4 rows per plot x 10 plots)
 - \$40 – Fence poles for garden plots
 - Cost per unit: \$10
 - Number of units: 40 (4 fence poles per plot x 10 plots)

F. Contractual

- **Total UAIP Funds Requested for Contractual: \$92,120** (\$80,720 in Year 1 + \$5,700 in Year 2 + \$5,700 in Year 3)

Annually for Years 1, 2, and 3: \$5,700

- \$█ – Contractual costs to hire Levo International to teach one agricultural workshop per year for 3 years and provide all workshop supplies. \$█/hour x 2 hours = \$█
- \$█ – Contractual costs to hire Gardeners to Farmers Greenhouse to coordinate at least one agricultural workshop a year for 3 years. \$█/hour x 2 hours = \$█
- \$█ – Contractual costs to hire 5 workshop leaders to each teach one agricultural workshop per year for 3 years and provide all workshop supplies. \$█/hour x 2 hours per workshop x 5 workshops = \$█
 - All of the above contractual work will help meet Objective 2.1 to host 6 agricultural workshops in the community gardens.
 - The contractors will provide services by █ annually.
- \$█ – Contractual costs to engage 4 farming participants in guest speaking to K-5 students. \$█/hour x 5 hours per speaker x 4 speakers = \$█

- This will help meet Objective 3.2 to hold 2 field trips to KNOX and engage 4 farming participants as guest speakers.
- The contractor will provide services by [REDACTED] annually.
- \$500 – Contractual costs for buses for field trips. 2 buses of approximately 40 students each x \$250 round trip per bus = \$500
 - This will help meet Objective 3.2 hold 2 field trips to KNOX and engage 4 farming participants as guest speakers.
 - The contractor will provide services by [REDACTED] annually.

Year 1 Only: \$75,020

- \$ [REDACTED] – Contractual costs to hire [REDACTED] to provide upgrades to the greenhouse at Battles Garden.
 - The upgrades will include the installation of new polycarbonate sidewalls, roofing, and vents, a new door, and upgrades to the flooring and heating system. Connecticut Greenhouse Company staff will complete this work.
 - This work is necessary because the walls and door of Battles Garden’s greenhouse are heavily stained and cracked, and do not let in sufficient light or heat. The greenhouse flooring and heating require upgrades to increase efficiency and productivity. The greenhouse vents do not open, and the roof fills with water.
 - This will help meet Objective 1.2 to provide upgrades to the greenhouse at Battles Garden.
 - This will help meet the annual outcome for 300 community gardeners and 15 farming participants to grow food in community gardens.
 - The contractor will provide services between July 2023 and [REDACTED]. This is a one-time expense.
- \$ [REDACTED] – Contractual costs to hire [REDACTED] to repair the fence at Enfield Garden.
 - Based on quote that includes installation of 1 section of 54" black aluminum fence, 1 4' wide walk gate, 1 heavy end gate hinge post, 1 regular end post, 1 set of self-closing hinges, 1 latch, 10' of 1 3/8" black top rail, and 10' of 2" x 9 gauge x 72" black vinyl coated mesh at Enfield Garden.
 - This work is necessary because Enfield Garden’s fence is broken, leaving the site, and community gardeners’ produce, vulnerable.
 - This will help meet Objective 1.3 to repair the fences at Enfield and Good Shepherd gardens.
 - This will help meet the annual outcome for 300 community gardeners and 15 farming participants to grow food in community gardens.
 - The contractor will provide services between August 2023 and [REDACTED]. This is a one-time expense.
- \$ [REDACTED] – Contractual costs to hire [REDACTED] to repair the fence at Good Shepherd Garden (see attached quote for Wyllys Street, where garden is located).

- This work is necessary because Good Shepherd Garden’s fence is broken, leaving the site, and community gardeners’ produce, vulnerable.
- This will help meet Objective 1.3 to repair the fences at Enfield and Good Shepherd gardens.
- This will help meet the annual outcome for 300 community gardeners and 15 farming participants to grow food in community gardens.
- The contractor will provide services between August 2023 and [REDACTED]. This is a one-time expense.
- \$ [REDACTED] – Contractual costs to hire [REDACTED] to create signage for 21 community gardens (see attached quote).
 - Full color digitally printed sign with satin laminate, brackets, and 0.063 thick solid aluminum panel: \$ [REDACTED] per sign x 21 signs = \$ [REDACTED].
 - This will help meet Objective 1.5 to install signage at all 21 community gardens.
 - The contractor will provide services by [REDACTED].

G. Construction – N/A

H. Other – N/A

I. Total Direct Charges

- **Total UAIP Funds Requested for Direct Charges: \$276,018.74** (\$149,029 in Year 1 + \$63,494.87 in Year 2 + \$63,494.87 in Year 3)

J. Indirect Charges (Modified Total Direct Costs)

- **Total UAIP Funds Requested for Indirect Charges for Project: \$20,889.88** (\$9,330.90 in Year 1 + \$5,779.49 in Year 2 + \$5,779.49 in Year 3)
- 10% de minimis indirect cost rate (Modified Total Direct Costs):
 - Year 1: \$149,029 - (\$80,720 subcontracts - \$25,000) = \$93,309, x10% = \$9,330.90
 - Year 2: \$63,494.87 - (\$5,700 subcontracts) = \$57,794.87, x10% = \$5,779.49
 - Year 3: \$63,494.87 - (\$5,700 subcontracts) = \$57,794.87, x10% = \$5,779.49

K. Totals

Program Income – N/A

Total Year 1 Cost: \$171,669.90

- UAIP Funds Requested: \$158,359.90

Total Year 2 Cost: \$82,584.36



- UAIP Funds Requested: \$69,274.36

Total Year 3 Cost: \$82,584.36

- UAIP Funds Requested: \$69,274.36

Total Costs Years 1-3: \$336,838.62

- **Total UAIP Funds Requested Years 1-3: \$296,908.62**

Total UAIP Funds Requested Years 1-3: \$296,908.62