

THE HILLTOP URBAN FARM

A FEASIBILITY STUDY OF REPURPOSING THE FORMER ST. CLAIR VILLAGE PUBLIC HOUSING SITE FOR FARMING



Provided for:



Conducted by:



Penn State
Extension

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EXECUTIVE SUMMARY

In 2013, the Hilltop Alliance engaged Grow Pittsburgh and Penn State Extension - Allegheny County to explore the concept of an urban farm on the 107-acre former St. Clair Village Housing project site, which has been demolished since 2010.

Throughout the winter (2013) and spring (2014) Grow Pittsburgh and Penn State Extension - Allegheny County conducted a four month long community visioning and stakeholder engagement process that distilled a detailed, community-driven proposal for a future farm on the site. The summary of that study and the preliminary feasibility study for the Hilltop Urban Farm Project are contained in this document.

ABOUT THE AUTHORS



Grow Pittsburgh (GP) is a non-profit organization with a mission to teach people how to grow food and promote the benefits gardens bring to our neighborhoods. We believe access to locally-grown, chemical-free fruits and vegetables is a right, not a privilege. We envision the day when everyone in our city and region grows and eats fresh, local and healthy food.

Through our work starting community gardens, operating two demonstration urban farms and managing a school-based gardening program, youth internship and adult apprenticeship program, Grow Pittsburgh has a wealth of practical experience in establishing and assisting community-led sustainable and productive urban agriculture projects of many types. Because of this direct experience starting numerous farming projects of various scales in and around Pittsburgh, we can anticipate many of the challenges a new farm startup may face.

Penn State Extension (PSE) is a research-based educational network that gives people in Pennsylvania's 67 counties access to the University's resources and expertise. It is funded by the U.S. Department of Agriculture and state and county governments. Through this county-based partnership, PSE Educators, faculty, and local volunteers work together to share unbiased, research-based information with local residents via information and a broad range of educational programs. Extension Educators Heather Mikulas (Allegheny County) and John Berry (Lehigh County) lead the state Ag Business and Farm Marketing teams. Together with horticulture staff, they provide in depth technical assistance for whole farm systems from business to marketing.

Together, Grow Pittsburgh and Penn State Extension bring extensive knowledge of the larger agricultural framework of Pittsburgh and its surroundings to bear on this proposal. Two of the authors, Heather Mikulas and Julie Pezzino, are Chair and Vice-Chair respectively of the Pittsburgh Food Policy Council, an organization of stakeholders from different sectors and backgrounds who collaborate to evaluate and improve our regional food system. Grow Pittsburgh has conducted surveys and focus groups with urban growers and hosted an Urban Agriculture Policy symposium in December 2013 that has helped distill priorities to improve the conditions for growing food in the city. Penn State Extension provides technical experience on a variety of community and economic development projects, with a particularly rich history in research based education related to agricultural production and farm management. As a result, our team has an in-depth understanding of what the broader community of Pittsburgh has to offer in terms of markets and opportunities, as well as the needs of the urban farming community in and around the city.



INTRODUCTION

The feasibility study has two distinct parts. In Part I of the study, we used neighborhood needs, the St. Clair Village site constraints, and community resident **desires** to refine the vision for the Hilltop Urban Farm from a list of 20 possibilities (including the three recommended in the Green ToolBox report, an intensive study of varied greening opportunities conducted by GTECH Strategies and the Western Pennsylvania Conservancy on behalf of the Hilltop Alliance in 2012) down to the five components presented in this report.

In Part 2 of the study, we explored the five components of the Hilltop Farm more in-depth. For each component, we completed a preliminary business plan and marketing plan that the Hilltop Alliance can use as they move into the next phase of exploring partners and funders for the project. We also created a master plan for the site that shows how the available land can be allocated for each project, and a preliminary budget for the infrastructure needs associated with the site build-out.

Funding for this report has been generously provided by Neighborhood Allies and the PNC Foundation.



NEIGHBORHOOD ASSESSMENT, SITE ASSESSMENT, COMMUNITY PROCESS

At the outset of Part 1, we conducted a neighborhood assessment to understand the challenges and opportunities of the surrounding community. This assessment allowed us to narrow in on several ways that an urban farm in St. Clair could serve the community.

NEIGHBORHOOD ASSESSMENT

The South Pittsburgh Hilltop covers approximately 4.35 square miles, or 2,800 acres. The Hilltop is comprised of twelve areas: eleven City of Pittsburgh neighborhoods and Mt. Oliver Borough, the only borough completely surrounded by Pittsburgh neighborhoods. With Mt. Oliver Borough included, these twelve areas make up roughly 9.5 percent of the City of Pittsburgh's population and approximately 8.5 percent of the City's land area. The Hilltop communities sit on the high ridge south of and above South Side Flats.



The neighborhoods surrounding St. Clair in Pittsburgh's South Side.

Because location is a key factor in any community-oriented project, we initially focused our neighborhood assessment and outreach efforts on the St. Clair neighborhood (198.4 acres). Even though it is a small neighborhood it has an intact community identity, partly due to the former St. Clair Village and partly due to the steep ravines and hilly topography that create a geographical divide between St. Clair and the adjacent neighborhoods of Arlington, Mt. Oliver (city), Carrick, and suburban Baldwin Borough. While Hays is also adjacent, it is separated from the South Side by Becks Run, and relatively inaccessible from the proposed farm location.

St. Clair Neighborhood Demographics

The St. Clair population is 209 people (1.1 persons/acre). The neighborhood has the 3rd highest concentration of elderly residents in the city, while 50.3 percent of the population is aged 19 and under.

52.6 percent of the residents of St. Clair are White, with 46.9 percent African American residents.

The median household income is \$27,727, and 45.7 percent of the households have an annual income of less than \$10,000. 26.5 percent of residents are living below the poverty threshold (6.5 percent higher than the city average). 76.5 percent of the households are below the poverty line and have children under the age of five.

The unemployment rate is 13.3 percent.

According to the 2012 Census, there are 465 Section 8 voucher households within a one mile radius of the St. Clair Village site. This number jumps to 1,148 Section 8 voucher households in the Hilltop Alliance service area.

These statistics demonstrate the need for structured programming and safe green space for youth, activities for seniors, as well as the creation of entrepreneurial opportunities for Hilltop residents.

St. Clair Neighborhood Housing

Originally wooded and then cleared during European settlement for farmland and residences, St. Clair became part of Pittsburgh in 1923. Between 1950 and 1956, the St. Clair Village housing complex was constructed. At its completion it comprised more than 70 buildings, housing at its peak 1,089 families. The neighborhood has lost more than 80 percent of its population since its peak in 1960; currently there is a 65 percent vacancy rate. This massive decline is not entirely due to the closing of St. Clair Village, as evidenced by the empty lots and vacant houses that make up 10.9 percent of the neighborhood's residential parcels.

In addition to the 107 acre HUD-owned former St. Clair Village, the majority of the smaller vacant parcels in St. Clair are publicly owned. Currently, 89 of the 191 parcels of land in the neighborhood are vacant; 48 of these are tax delinquent. Also, approximately 50 percent of the 165 housing units in St. Clair are vacant. Public ownership of these lots can enable a more comprehensive redevelopment strategy to “infill” and rebuild the houses that have been lost. While this idea is supported by many community members who have expressed interest in attracting investment to the neighborhood, other, newer residents have been attracted to the isolated nature of the neighborhood and may not support higher density development.

St. Clair Transportation



An overview of the St. Clair Village site and its surroundings.

The main entry routes to the neighborhood are from the North via Arlington Road to Mountain Ave. and from the South via Becks Run Road to Wagner St. to Mountain Ave..

One key asset of St. Clair is the frequency of the #44 Knoxville bus, which passes through the neighborhood every 20 minutes during weekdays. The bus stop is adjacent to one of the entrances to the proposed Hilltop Urban Farm.

St. Clair Neighborhood Food Access

One of the challenges that Hilltop residents face is food access. The neighborhood has been identified as an area with low food access by Just Harvest in its 2013 report “A Menu for Food Justice: Strategies for Improving Access to Healthy Foods in Allegheny County.” The nearest supermarket for St. Clair residents is a Foodland on Brownsville Road, located 1.8 miles away. During the market season, there is a Citipark’s Farmers Market located at the Carrick Parking Center, also on Brownsville Road.



St. Clair Village at its peak size in 1973.

While the neighborhood does not have a business district, in the past there were more options for purchasing food in and around the neighborhood. Until the closing of St. Clair Village there was a convenience store on Kohne St.

St. Clair Neighborhood Green Space Access

The Green ToolBox examined the access to greenspace of various Hilltop neighborhoods. Because the former St. Clair Village site is surrounded by a locked fence, the nearest public green space to the residents of St. Clair is the Phillip Murray Playground located across Mountain Ave from the St.

Clair neighborhood.

Despite the locked gates, there are many visible entry points onto the St. Clair Village site showing that people are using the site for various forms of recreation. On one occasion, staff at Grow Pittsburgh and the Hilltop Alliance observed a hunter scouting for turkey in the middle of the site. Likely thanks to the locked gates and regular patrols by the Housing Authority, we have seen no traces of illegal dumping, a common problem at vacant properties of this scale.

A few residents of St. Clair have demonstrated their enthusiasm for neighborhood greening by implementing a gateway project at the corner of Wagner St. and Mountain Ave, and painting a city railing along Mountain Ave. This summer, there are plans for two additional neighborhood greening projects.

Broader Context

While the primary goal of the process has been to generate a farm proposal that addresses the needs and opportunities within the St. Clair neighborhood and the larger Hilltop community, it is also worth noting that there is significant interest in local food and urban agriculture across the city. More and more people are growing food in Pittsburgh, in backyards, community gardens, and urban farms. Those who are seeking markets are finding an increasingly receptive consumer who is gaining a new understanding of the advantages of local food, including lower transportation costs, increased freshness, and support of the local economy.

Conversely, we would like to point out that Urban Agriculture is not a “fix-all”. We recommend that the Hilltop Urban Farm project be pursued alongside (and importantly, not at the expense of) other concentrated efforts by the Hilltop Alliance and its partners to address the ongoing problems that many of the Hilltop communities are facing.

SITE ASSESSMENT

The majority of the 107 acre former St. Clair Village parcel is wooded. This includes over 70 acres of steep hillsides to the North, East, and South of the parcel. This area is designated as a “Landslide Prone Area” where most development is prohibited. As the Green ToolBox report states, “In some neighborhoods, such slopes, such as around Mount Washington, have been embraced for trail development adding significant outdoor recreation options to the adjacent community.”

CITY OF PITTSBURGH

Color (2ft) Topographic Map

032

Primary Grid: Pennsylvania State Plane West Zone Coordinate System

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Dec 16, 2009

DEPARTMENT OF CITY PLANNING

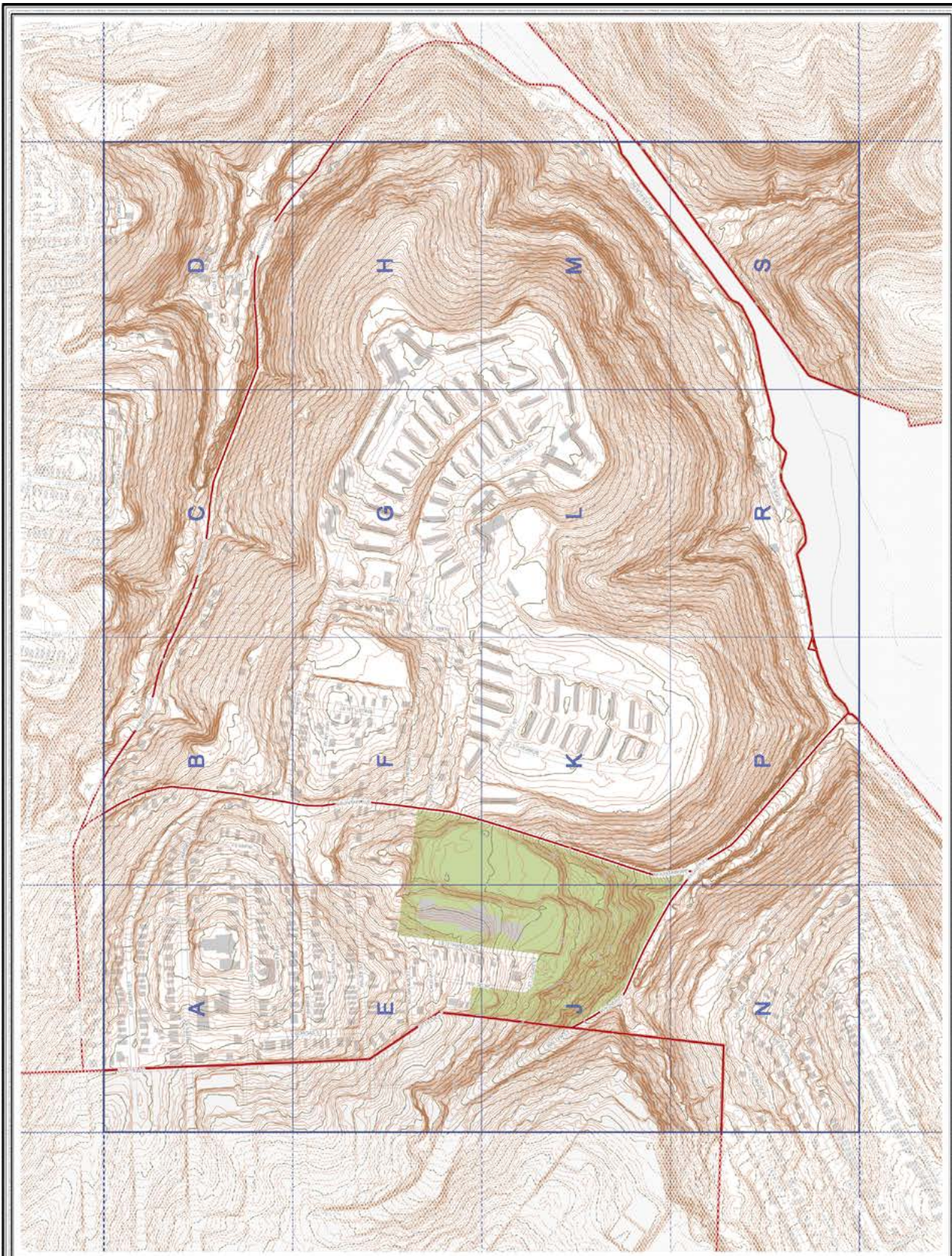
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MAP KEY

- Street
- Highway
- Proposed Highway
- Intermodal Transportation Corridor
- Open Space
- Pic Index
- Block Index
- City Boundary
- Neighborhood
- Building
- Water



Feet
0 100 200 400
1:2,400
1 inch equals 200 feet



A topographical map of St. Clair and its surroundings, courtesy of City of Pittsburgh Department of Public Works.

This map on the next page shows the topography of the St. Clair Village site and approximate locations of former structures.

The St. Clair Village housing complex was located on the 35 or so acres at the top of the hill surrounded by woods to the North, East, and South, and the St. Clair neighborhood to the West. St. Clair Village was demolished in phases between 1973 and 2010. Between 1973 and 1995, the southernmost three buildings in the exterior loop were demolished. By 2005 all of the buildings in the exterior loop had been completely demolished. By 2008, all of the interior loop buildings had been demolished.



Looking towards the Cresswell St. entrance to the St. Clair Village site from Mountain Ave.

The site is currently fenced on the neighborhood side with a 6' chain link fence with locked gates at all street entry points. There is also an 8' welded wire fence between the former building areas and the wooded hillsides. There is also 6' chain link fencing with gates separating the Bonifay St. loop from Schuler St.

Much of the historical information about the site came from a Phase 1 environmental review conducted by MTR Landscape Architects, LLC and Collective Efforts, LLC on April 30, 2013 for the proposed City of Pittsburgh Department of Public Works (DPW) Division 4 Maintenance Garage (Project Number: 12-16010) on the northeast portion of the site. That

assessment of the .25 miles surrounding the proposed garage concluded “there were no indications that the site has had any past environmental concerns... did not reveal any significant evidence of recognized environmental conditions in connection with the site.” This radius includes the entirety of the St. Clair Village parcel.

In addition, our team visited the site on two occasions to take soil samples and more carefully evaluate the topography and species there. Access to the site was generously provided by Mr. Harvey Butts of the DPW on these occasions.

Most of the surface of the cleared area is covered with 0-3” topsoil, and below that 6-9” of brick, fill and occasionally concrete. Below that is fine



A view of the St. Clair Village site as it looks today.

clay over a sandstone shelf. There are exposed foundations of the former St. Clair Village buildings in many sections of the site. In many places, when we tried to dig in the soil we encountered rubble. The one exception to this was the exterior loop where the earliest demolitions took place, thus allowing the soil to build over the intervening 9-40 years.

Preliminary soil testing of the proposed agricultural areas of the site has not revealed lead contamination. The testing was completed by the University of Massachusetts, Amherst Soil Testing Lab which uses a Modified

Morgan extracting solution that results in an Estimated Total Lead number. This first round of testing was meant to serve as an initial screening of the site. We recommend that Hilltop Alliance conduct additional soil testing on the areas being proposed for agriculture to determine if there is any contamination present before the proposed farm is implemented. A second round of testing should assess the Total Sorbed Lead (using EPA method 3050 or 3051) and other heavy metals.



Fallen over electric poles at the gate to Bonifay St.

While the former buildings on the site pose a challenge for farming activities, a positive legacy of the former development is that the site already has significant infrastructure including roadways and sidewalks, water and sewer lines, and electrical lines. However, due to years of abandonment, it is uncertain how functional this infrastructure is, therefore it is difficult to know what if any savings this existing infrastructure will provide.

COMMUNITY PROCESS

By combining the results of the neighborhood assessment with the findings of the site assessment, we identified specific community needs that could be met by one or more agricultural projects on the St. Clair Village site. In order to ensure that any farm proposal met the needs and also gen-

erated significant community enthusiasm and support, we have included community voices in the feasibility study process from the beginning.

Steering Committee

The steering committee for the feasibility study included community residents, elected officials, church leaders, and local NGOs.

- ◇ Chris Beichner, Executive Director, Allegheny Land Trust
- ◇ Matt Barron, Policy Director, Office of Mayor Bill Peduto
- ◇ Lex Janes, Deputy Community Affairs Manager, Office of Mayor Bill Peduto
- ◇ Barbara Arroyo / Brandon Forbes / Kevin Kerr, Office of Council President Bruce Kraus
- ◇ JW Kim, Senior Development Manager, Housing Authority of City of Pittsburgh
- ◇ Harvey Butts, Project Manager, Department of Public Works
- ◇ Gene Ricciardi, District Magistrate (former City Councilman)
- ◇ Mike Carter, St. Clair Resident
- ◇ Suzanne Photos, Resident/Mt. Oliver/St. Clair Block Watch/Hilltop Alliance Board Member
- ◇ John Niederberger, Mt. Oliver City Resident/Hilltop Alliance Board Member
- ◇ Evaine Sing, Operations Director, GTECH Strategies (and Landscape Architect)
- ◇ Pastor Maurice Trent, Lighthouse Cathedral

The steering committee met 5 times between December 11, 2013 and April 16, 2014 at the Hilltop Alliance office on Brownsville Road. Between meetings, each steering committee member was tasked with reaching out to their networks to get feedback on the ideas being generated from other stakeholders.

During our second meeting, we led a visioning and goal-setting session with the steering committee and arrived at this list of goals for the Hilltop Urban Farm:

- ◇ Youth involvement
- ◇ Attract neighborhood investment

- ◇ Easy access to produce - retail, distribution
- ◇ Jobs and skills training
- ◇ Public education - gardening, health & wellness

We were able to eliminate from our list of farming ideas any which did not clearly meet these goals. This resulting list included several ideas that had been initially proposed in the Green ToolBox. We refined these concepts further with feedback from several community stakeholders and presented them to the public to generate conversation and feedback.

Community Meetings

On February 20, Hilltop Alliance hosted the first of two community meetings to present the Hilltop Farm idea to the larger community and gather feedback from attendees. Held at the Lighthouse Cathedral two blocks from the proposed location of the Hilltop Urban Farm, 76 people attended. 35 percent of those in attendance reside within 1 mile of the proposed farm, while only 11 attendees were from outside of the the Hilltop Alliance's service area.



Participation at the February 20, 2014 community meeting.

During this first community meeting, we presented the audience with the following five possible agricultural uses of the approximately 40-acre mostly-level portion of the site.

Community Greenspace

Community greenspace is an urban open space that provides an

opportunity for community to gather while also providing productive activities. Greenspaces could include: pollinator garden, community vegetable garden, rain garden, natural playground, pavilion/shelter, shaded seating areas.

Agritainment

The public or customers are invited onto the farm for an experience. Agritainment can include u-pick, for example berries or pumpkins are very popular with families. Harvest festivals and other seasonal celebrations can also draw visitors to a site.

Trees Nursery for Edible and Native Plants

In a native plant nursery, plants endemic to the region are sold as landscaping material. Because they are well-conditioned to the soil, there is a lower cost of maintenance once they are established. The ecological benefits of native plants include: larval hosts for insects, appropriate water use, food for native birds, insects and animals; in addition, many have medicinal and culinary uses.

Compost

The DPW and CitiParks currently compost tree trimmings and other organic materials for its own use. But there is no public municipal composting in Pittsburgh. While residents of townships like Wilkinsburg and Robinson have access to municipal compost for free, residents of Pittsburgh must buy compost for \$30-48 per yard. If limited to municipal yard waste and tree trimmings, or if managed by a proficient operator, composting at the Hilltop Urban Farm shouldn't result in smell or rodents.

Farm Incubator

In a farm incubator, aspiring farmers can rent prepared growing space, access farming equipment and facilities, and are provided education to help them build skills in organic agriculture and running a profitable small farm business. This model enables participants to 'incubate' their farm for a limited amount of time before embarking on an independent farming endeavor.

Attendees provided feedback for each idea presented using color coded sticky note pads, green for "Pros" and pink for "Cons". These comments were posted around the room and at the end, attendees used dot stickers to vote for their five highest priority comments. In this way, we were able to gather a large amount of individual feedback from all who

attended the meeting. A complete summary of this feedback from the first community forum can be found in the appendix. The feedback gathered during this meeting and the subsequent steering committee meeting significantly shaped the final proposal for the Hilltop Urban Farm outlined in this report.



Aaron Sukenik, Executive Director of the Hilltop Alliance, presenting at the June 25 community meeting.

On June 25 we held our second community meeting, again at the Lighthouse Cathedral. During this meeting, we presented the components of the Hilltop Urban Farm and celebrated the end of this phase of the planning process.

This concludes the summary of our process. The following pages outline the proposal for the Hilltop Urban Farm.

THE HILLTOP URBAN FARM PROPOSAL

As a result of the community-driven process described in this report, we have arrived at the following detailed proposal for the Hilltop Urban Farm at the former St. Clair Village public housing site.

Vision

The Hilltop Farm seeks to be a transformative entity in the Hilltop community and the Greater Pittsburgh Region, by repurposing the vacant land that was formerly the St. Clair Village housing project into a vibrant space where residents can access education and community development projects related to agricultural production and entrepreneurship. Environmentally sustainable agriculture land management will support fresh food production, providing access to nutritious food and a safe and beautiful space for residents to enjoy nature.

Mission and Goals

The Hilltop Farm hopes to increase entrepreneurship through education; increase production and access to fresh produce; engage youth from the Hilltop communities; and build community within the Hilltop. The Hilltop Farm will also include community park space, to encourage both passive and active recreation at the site. The Hilltop Farm seeks to be a fiscally sustainable community project, with land, farm assets, and educational programming cooperatively managed by The Hilltop Alliance, The Allegheny Land Trust, Lighthouse Cathedral of Pittsburgh, Grow Pittsburgh, Penn State Extension, and others.

FARM STRUCTURE

The Hilltop Farm will consist of five separate components: a Farmer Development Program, a CSA farm, a Youth Farm, Seasonal Activities, and a Community Greenspace. The Hilltop Farm also includes recreational space, with trails through the surrounding woods, and a managed community park at the heart of the site. Each of these are described briefly here and more in-depth in the Hilltop Farm Components section of this report.

N

EXISTING FORESTED AREA

LIGHTHOUSE CHURCH

EXISTING NEIGHBORHOOD

HIGH TUNNELS

EDUCATION

COMMUNITY GARDEN

FISHER ST

FARM STAND

COMMUNITY PARK & PLAYGROUND

FUTURE EXPANSION

CRESSWELL ST

KOHN ST

RAINWATER HARVESTING

FARM INCUBATOR PLOTS

SHARED PROCESSING & STORAGE

MAIN ENTRANCE

ORCHARD

MOUNTAIN AVE

FARM INCUBATOR PLOTS



HILLTOP FARM
SITE PLAN
GROW PITTSBURGH
JUNE 2014



Google earth

The **Farmer Development Program (FDP)** program will assist individuals wanting to farm for a profit in learning the production, business, and marketing skills needed to be successful. Aspiring farmers will be able to rent prepared growing space, access farming equipment and facilities, and be provided production training and business education to help them build a profitable farm business. This model allows individuals to limit financial risk while deciding if farming is a viable endeavor for them, as capitalization costs to begin farming can be unobtainable. After up to three years incubating their farm and paying a fee to access the program, they will graduate off the site.



A vignette illustrating the view of the Hilltop Farm from the roof of the proposed educational center. In the foreground, the Youth Farm is to the left and high tunnels are to the right. In the distance, the CSA farm comprises the inner part of the Bonifay St. loop, and the outer part of the loop is divided into FDP program plots.

The **Youth Farm (YF)** component of the Hilltop Farm will be managed by the Lighthouse Cathedral of Pittsburgh, a longstanding presence in the Hilltop Communities with established youth and community engagement programs. Youth from the Hilltop communities will learn life skills, food production, business management, and teamwork while working together to grow and sell food through a Farm Stand. There is potential to have this produce sold to low income residents via acceptance of SNAP and nutrition vouchers, as well as at-cost contract growing with the Greater Pittsburgh Community Food Bank.

The third component of the Hilltop Farm is a **Community Supported Agriculture, or CSA**, farm, which will provide weekly boxes of produce during the growing season to residents of the Hilltop communities. This business model will employ a full time experienced farmer to grow the business to 200 shares over four years. Some of the shares will be made available at below market rates to ensure participation by a cross section of residents, regardless of income.

The fourth component, **Seasonal Activities (SA)**, is both a revenue generating and community building endeavor. Some of the options available to Hilltop Alliance may include spring and fall festivals or activities, such as pick-your own berries or a pumpkin patch, or property and facility rental for special events and fundraisers, such as on-farm dinners or weddings.

In addition to these four revenue-generating components of the Hilltop Urban Farm, we recommend that the former St. Clair Village site also include a community allotment garden, trail access, and community park space that are open to residents of the surrounding neighborhoods. This **Community Greenspace** will provide an important point of connection between the Hilltop Farm and the residents of the immediate neighborhood. By having a designated public space within the Hilltop Farm, residents can directly benefit from the farm's development even if they are not actively involved in any of the farm's components.

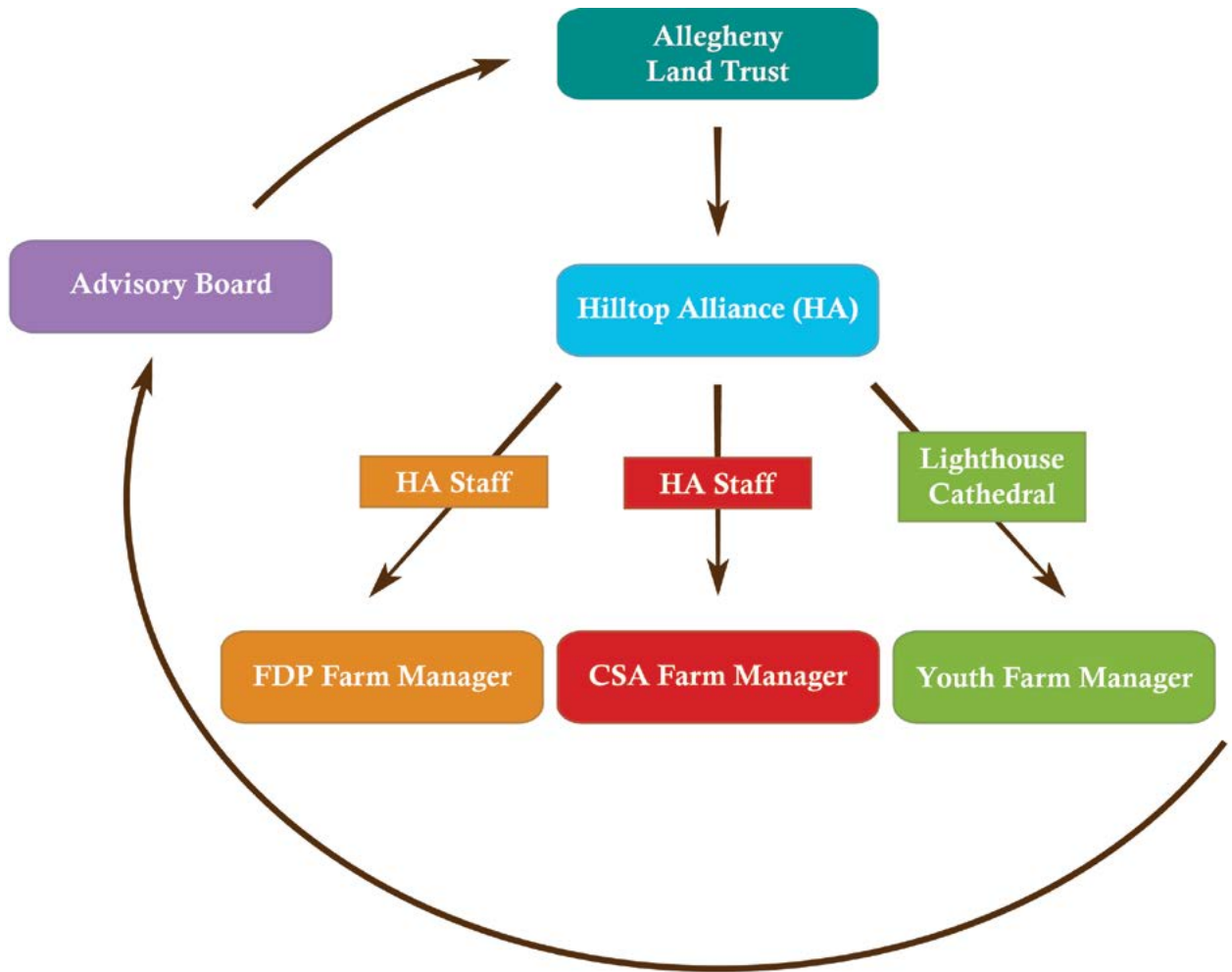
In addition, the wooded section of the site, which cannot be developed with structures due to subsidence concerns, could provide revenue via management of forest products such as timber, or via agroforestry food production, which could include mushrooms, ginseng, or berries. The wooded section of the site, however, is not further detailed in this report.

MANAGEMENT & ORGANIZATION

The Hilltop Farm will be a non-profit under the auspices of the Hilltop Alliance. The Hilltop Alliance will oversee the Hilltop Farm, and manage paid staff. The Allegheny Land Trust will hold the land title in conservation, and lease it to Hilltop Alliance. Lighthouse Cathedral will manage the Youth Farm component of the Hilltop Farm. Grow Pittsburgh and Penn State will serve as advisors and educators.

Allegheny Land Trust (ALT) will own the property and lease land to Hilltop Alliance (HA). HA will employ two full time employees. The first position is the Farm Manager who will be responsible for managing the Farmer Development Program (FDP) and for general site and equipment maintenance. The second position is the CSA Farm Manager who will

be responsible for managing production of produce to be sold through the CSA model for revenue. The Lighthouse Cathedral will have an agreement with HA to manage the production and programming components of the Youth Farm, and employ the Youth Farm Manager. The Advisory Board will consist of stakeholders from many sectors to help achieve all the goals of the Hilltop Farm.



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Hilltop Alliance (HA)

Hilltop Alliance is structured as a non-profit collaborative organization comprised of community-based organizations from the following eleven South Pittsburgh neighborhoods: Allentown, Arlington, Arlington Heights, Beltzhoover, Bon Air, Carrick, Knoxville, Mount Washington, Mount Oliver City, South Side Slopes, and Saint Clair, as well as Mount Oliver Borough. As an umbrella organization, the primary goal of Hilltop Alliance is to connect neighborhood-based organizations and leverage their individual efforts, creating a shared vision and voice for the Hilltop, thereby preserving and creating Hilltop assets. Their mission is to preserve and create assets in the Hilltop community through collaboration and coordination of resources.

In 2007, a deliberative democracy process involving a wide-range of South Pittsburgh Hilltop stakeholders examined the assets and challenges facing Hilltop neighborhoods. As an outcome of this discussion, in 2008, four Hilltop organizations (Allentown CDC, Carrick Community Council, Hilltop Economic Development Corporation, and Mt. Oliver City/St. Clair Block Watch) formally came together to collaborate on improving the quality of life across the Hilltop. In 2009, Hilltop Alliance began operations (incorporation 3/29/2009), adding the Beltzhoover Civic Association as its fifth member. The Alliance was granted 501(c)(3) nonprofit status in 2010. In 2012, Mount Washington CDC and South Side Slopes Neighborhood Association were added as members.



Allegheny Land Trust (ALT)

Allegheny Land Trust's mission is to serve as the lead land trust conserving and stewarding lands that support the scenic, recreational and environmental well-being of communities in Allegheny County and its environs. ALT is an independent Pennsylvania nonprofit organization incorporated in 1993 to protect land of natural value in and adjacent to Allegheny County. ALT helps local people save local land that contributes to the scenic, recreational, educational and environmental wealth of our communities, and has protected over 1,500 acres.



Lighthouse Cathedral (LC)

Lighthouse Cathedral of Pittsburgh has a Gospel-driven service mission to the poor, lost and rejected in the community. LC has several long standing and active social programs which focus on youth development, sheltering homeless, and a food pantry.

Grow Pittsburgh's and Penn State Extension's descriptions can be found in the "About the Author" section of this report.

ADVISORY BOARD

It is recommended that an advisory board be developed before the farm is operational in order to build and maintain relationships as the partners pursue the growth and long term viability of this complex project. The board will be tasked with managing the high-level strategic aspects of the project; addressing problems and opportunities as they arise; ensuring the implementation and follow-through of project goals; and ensuring that all the Hilltop Farm entities are operating effectively. Advisory members can represent the breadth of the stakeholder base and include community residents, elected and regulatory officials, farmers, educators, entrepreneurs, and business leaders interested and invested in achieving group goals.

The community board will provide many advantages, including:

- Overcoming blind spots created by closely-held businesses
- Creating a sounding board for ideas, problems and solutions
- Drawing from diverse strengths of others
- Enhancing vision and insight critical to business growth
- Providing support and encouragement for staff and program participants
- Reducing isolation and offer understanding
- Sharing individual networks
- Multiplying the availability and usefulness of information
- Providing/facilitating needs-based training
- Promoting accountability

Qualities of successful board member interaction include:

- Ready to share all necessary business details
- Progressive and forward thinking
- Humble, patient, respectful and trustworthy
- Able to have ideas challenged
- Capacity to listen objectively
- Ready to challenge others
- Has decision-making authority for business

- Part of a business with a history of success
- Open to change

FACILITIES

The Hilltop Farm site has many infrastructure assets, including paved roadways and 8' fencing around 75 percent of the perimeter of the cleared part of the site. It also has subsurface sewer and water lines and electrical lines throughout, though it is impossible to assess the serviceability of this infrastructure. In addition to possibly bringing those services back on-line, the site will need the following overall infrastructure to commence operations:

- Educational building or pavilion - to hold classes, offer shade
- Restrooms – sufficient to service participants of all the components of the farm
- High Tunnels (x4) – to start seeds for CSA and youth farm, to service needs of participants in the Farmer Development Program
- Secure storage – for tractor, tools
- Processing area – a processing structure, appropriate washing, trimming, and packing facilities, and sufficient cooler space to accommodate all production needs and prepare produce for distribution
- Water lines - for all the growing areas
- Fencing - new fencing for youth farm and community garden; increase the height of perimeter fencing in the FDP and CSA areas (where Bonifay St. and Cresswell St. connect); and consider interior fencing to define the CSA and FDP areas
- Parking - depending on the scale of the Seasonal Activities, the creation of additional parking on unused portions of the site may need to be explored
- Compost - to ensure suitable soil for diversified vegetable production

FINANCIAL INFORMATION & BUDGET NARRATIVE

Because the details of the Hilltop Urban Farm and its components may change as the Hilltop Alliance enters the fundraising phase of its project planning, we have provided per-item costs associated with the infrastructure needs of the site.

This initial start up cost includes a pole building to securely store the farm

tools and equipment, coolers, processing area, cement slab floor, compost for soil development, and plumbing for cold running water. Budgeting

Infrastructure			
initial investment	\$	605,160.00	
initial investment as annual expense	\$	18,448.10	
		initial capital investment plus yr 1 loss	\$671,900.00
		initial investment as annual expense plus that year's gain/loss	\$ (85,188.10)
		to break even with initial investment plus four years gain/loss	\$730,050.00

Facilities and Infrastructure Needs		number		years	annual
	cost per unit	of units		expensed over	expense
30X96 high tunnel	\$ 7,200.00	four	\$ 28,800.00	5	\$ 5,760.00
fenced acre	\$ 3,600.00	ten	\$ 18,000.00	15	\$ 1,200.00
irrigated acre	\$ 950.00	ten	\$ 9,500.00	5	\$ 1,900.00
cold storage	\$ 5,400.00		\$ 5,400.00	7	\$ 771.43
BCS machine	\$ 6,000.00		\$ 6,000.00	5	\$ 1,200.00
tractor and tools	\$ 32,200.00		\$ 32,200.00	15	\$ 2,146.67
seeder	\$ 300.00	two	\$ 600.00	5	\$ 120.00
hand tools	\$ 2,000.00	two sets	\$ 4,000.00	5	\$ 800.00
packing equipment	\$ 3,700.00		\$ 3,700.00	5	\$ 740.00
pull cart	\$ 220.00	six	\$ 1,320.00	5	\$ 264.00
wheel barrow	\$ 180.00	six	\$ 1,080.00	5	\$ 216.00
trimmer	\$ 650.00		\$ 650.00	5	\$ 130.00
shed	\$ 48,000.00		\$ 48,000.00	15	\$ 3,200.00
restroom					
driveway					
walkway					
electric					
sewer					
water					
compost	\$ 494,760.00				
unit total	\$ 605,160.00				
initial investment for everything listed for a first year start up			\$ 159,250.00		
annual cost of initial investment for everything listed (depreciation concept)					\$ 18,448.10

for fencing is included, as is irrigation, tractor, tools, seeds, packing and processing equipment. The initial investment for these items, with what is known at this point, is \$730,050.00.

The overall start up costs include \$159,250 for the initial acquisition of equipment, tools, growing materials, production and processing structures, and \$605,160 for compost and soil development which will be spread over four users; for a total infrastructure cost of \$730,050 (not including the

aforementioned pieces of information that need to be determined). These costs can be depreciated annually at a rate of \$18,448.10, keeping in mind that each durable good has a different life span, for example, a tractor has a lifespan of 15 years.

Things to Consider

- A large portion of this initial investment is allocated for acquiring enough quality compost to ensure adequate production needs to meet the yield demands for financial sustainability.
- We recommend that Hilltop Alliance take action as immediately as is feasible to begin building the soil in the proposed farming areas. Because the majority of the proposed agricultural activities will be taking place on land that once had buildings and now contains small amounts of topsoil mixed with debris, it will be imperative to remove much of this debris and import and/or build new topsoil in order to attain maximum crop yield, which is necessary to meet the projections in this report. Cover-cropping with soil building plants and adding organic material can help prepare the ground while the plans for the farm are being finalized, and reduce the net amount of trucked-in soil, which is costly. These passive measures can significantly impact soil quality, as evidenced by the quality of the soil in the exterior ring of Bonifay St., which has had at least 3 more years to build soil compared to the rest of the site.
- It is important to note that there are many variables missing from this budget, that will emerge after Phase I of the project. Decisions around utilities, types of restrooms, irrigation, walkway materials, etc. will alter the budget.
- Additional revenue streams may be identified to move project net toward the positive.

COMMENSURATE PUBLIC BENEFITS

Any time land reserved for public housing is used for another purpose, it must be demonstrated that the new use has a commensurate public benefit equal to or greater than that of public housing for low-income individuals. What follows is a summary of the public benefits provided by the approximately 45 acres of flat, formerly developed land and approximately 70 acres of wooded steep slopes surrounding the former St. Clair Village public housing site.

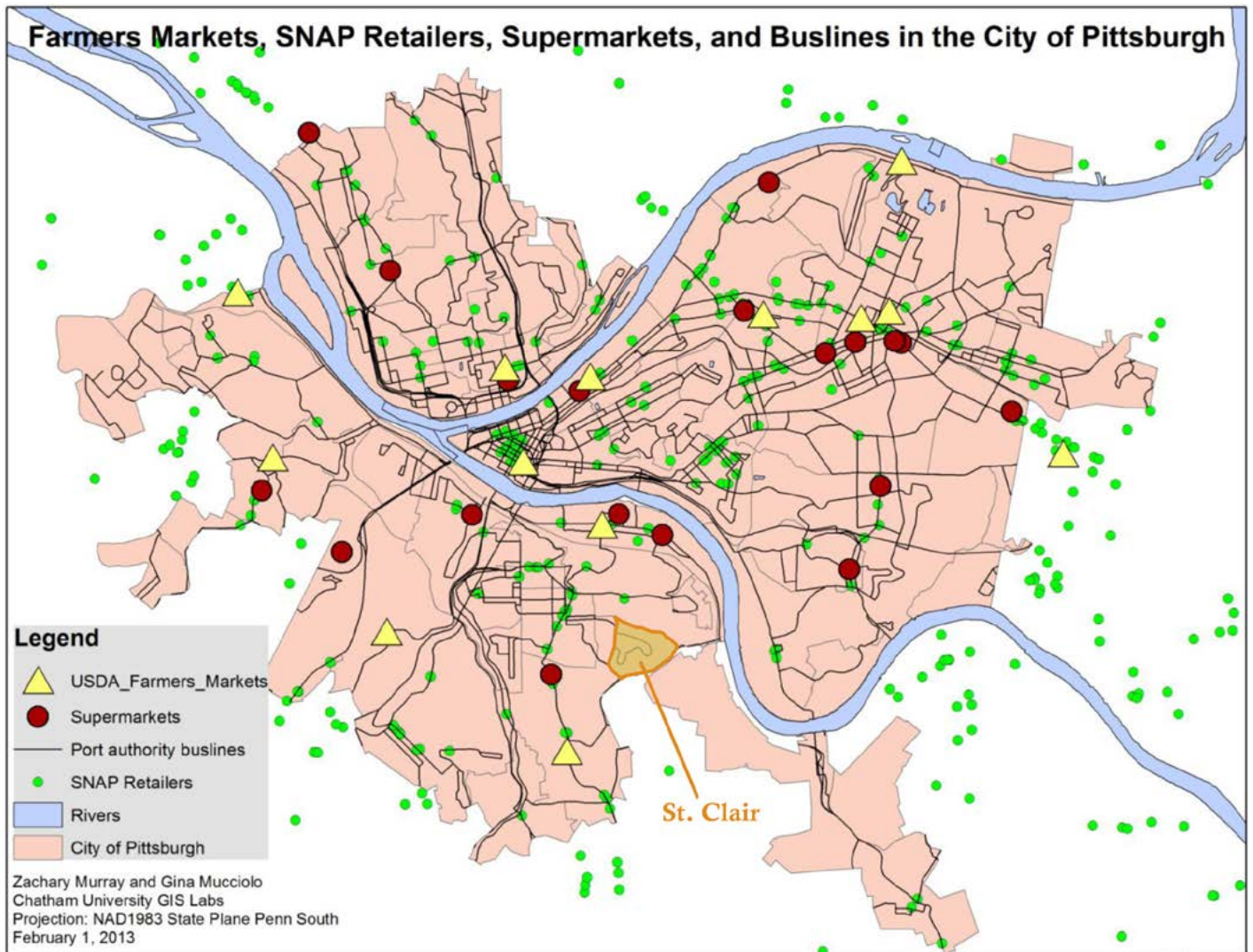
FOOD ACCESS

Just Harvest's A Menu For Food Justice report states: "According to a 2012 report prepared for the US Department of the Treasury CDFI Fund Capacity Building Initiative, among cities with populations of 250,000-500,000, Pittsburgh has the largest percentage of people residing in communities with 'low-supermarket access' (LSA)."

St. Clair easily fits the USDA definition of a "food desert:" a low-income community with a poverty rate of 20 percent or more that is located one mile from a supermarket or grocery store. In a food desert, the "scarcity of healthy [food] options is intensified by risk factors such as low-incomes, absence of reliable transportation, and lack of cooking time or knowledge." Among the Hilltop neighborhoods, it is the farthest from the three Southside fresh food retailers: the Foodland on Brownsville Road., the Giant Eagle Southside in the Southside Flats, and the Carrick Farmer's Market. At present, there are no CSAs with drop points in the Hilltop Communities.

The Hilltop Farm will increase food access in St. Clair and the surrounding neighborhoods by making fresh, local produce available through the CSA subscriptions and at the Youth Farm stand, which will accept cash alternatives such as SNAP, WIC, and nutrition vouchers. The projections for the five acre CSA farm is that at full production, there will be enough produce to supply 200 shares, with each share being enough food to last a family of four for a week. The half-acre youth farm has the potential to grow up to 5,000 lbs of food for sale to local residents each season, and

each 3'x12' plot at the community garden has the potential to grow between \$200 and \$300 worth of food each season for the plot-holder. At full capacity, the Hilltop Farm will generate more than enough food to feed the existing population of St. Clair.



From the Just Harvest report A Menu for Food Justice, with annotation.

HEALTH

Mounting evidence shows that increasing the availability of fresh, healthy, affordable food leads to better health outcomes and lower healthcare costs. The majority of studies that have examined the relationship between access to a supermarket or large grocery store and dietary intake find that better access to these stores is associated with healthier food intakes. Research has also proven that plant-based foods like fruits, vegetables, and nuts and whole grains are linked to reduced risk of cardiovascular disease. Conversely, low access to supermarkets is known to be associated with higher risk of preventable conditions including obesity, diabetes and heart disease. Pittsburgh has the fourth-highest rate of obesity (29.3 percent) among US metro

areas. A 2009 report by RTI International found obesity costs the country \$147 billion annually. This includes both direct costs, like doctor's visits, hospital stays, medications, and indirect costs, like lost economic output as a result of illness or death. In addition, hunger is estimated to cost the economy \$167.5 billion yearly due to lost economic productivity.

ECONOMIC OPPORTUNITY

According to A Menu For Food Justice, currently 99 percent of the \$700,000 grocery retail demand leaves St. Clair and Mt. Oliver. The adjacent neighborhoods of Arlington has a grocery retail demand of \$2,800,000, of which 91 percent leaves the neighborhood. Clearly, there is significant demand for fresh food in St. Clair and the surrounding community that could be met by the various retail options being created for the Hilltop Farm produce, as well as the businesses incubated in the Farmer Development Program.

The focus of the Hilltop Farm's Farmer Development program is to train participants in the production and business skill needed to start and run a profitable farm, thus supporting small business development. Education in business planning, market research, and product development may give individuals the tools they need to start their own income generating businesses, or act as a resume builder for employment. The potential for ancillary businesses, such as value-added businesses, food hubs, or restaurants, to develop over time may spur additional jobs and economic activity.

On May 14, 2013, Grow Pittsburgh launched a Farmer Development Program Survey to gather feedback for this proposal. Within 24 hours, the survey had received 30 responses, only 1 of which said they would not be interested in participating in the program we have described here. Complete survey results can be found in the Appendix section of this report. It is recommended that Hilltop Alliance conduct further market analysis.

FARMLAND PRESERVATION

Farmers over the age of 55 control more than half of all US farmland. It has been estimated that as many as 50 percent of US farmers will retire in the next decade. The USDA estimates that 70 percent of farmland will change hands over the next decade. Farmland close to cities is at risk of being lost to development during these farm transitions. The Farmland Trust says that between 2002 and 2007, 4,080,300 acres of agricultural land, an area nearly the size of Massachusetts, were converted to developed uses. Ninety one percent of our fruit and 78 percent of our vegetables are grown

FOOD IN THE PATH OF DEVELOPMENT



in counties with urban population centers, where land is most threatened. As farms move farther away from cities, the costs associated with transportation rise, and the quality of the product diminishes.

The Hilltop Urban Farm has the potential to create 45 acres of farmland. In the initial layout of the proposed farm, 4.75 acres of the 12 acres of farmland are allocated for those who meet the USDA definitions for socially disadvantaged farmers and limited resource farmers. In addition to creating farmland in the city of Pittsburgh, the Hilltop Farm aims to train a next generation of skilled farmers who can then graduate onto threatened farmland in Allegheny and the surrounding counties.

YOUTH OPPORTUNITY

The Hilltop Farm will allow neighborhood youth access to safe green space, hands-on experience growing food, life skills via a collaborative team-based work approach, and business and marketing skills through marketing and sales of the produce. Teens who participated in similar programs in New Orleans (Grow Dat) reported having improved their communication skills, feeling more comfortable meeting people different than them in their community, and growth in their leadership abilities after the program. In addition, youth who participate in farm-based education experience increased nutrition awareness, higher learning achievement, and increased environ-

mental awareness. These youth share their experiences with family and friends, becoming agents of change beyond the farm.

Health of the community and livability is supported by the notion of Nature Deficit Disorder (NDD) a concept put forward by author Richard Louv in his critically acclaimed, “Last Child in the Woods.” Louv’s theory is that the rise in obesity, attention disorders, and depression amongst youth may be attributed to the widespread lack of contact with nature experienced by many youth and adolescents. The former St. Clair Village has been closed behind locked fencing. Opening the site up to Hilltop residents of all ages can increase quality of life for neighborhood residents, especially as our society continues to urbanize.

STORMWATER MITIGATION

In the article, Not All Green Space is Created Equal appearing in The Journal for Surface Water Quality Professionals 2007, it is stated that 13 to 76 percent of annual precipitation can be sequestered by forests. In the case of St. Clair Village where approximately 70 acres are forested, between 10 million and 58 million gallons of water are absorbed on site annually. Preserving unpaved surfaces will keep this rain and snow melt out of the region’s rivers via Combined Sewage Overflows. This can help protect river health, and lessen flooding in basements and streets, as the precipitation infiltrates into the ground restoring the water table, or is taken up by the vegetation. A Los Angeles, CA study Toward a Sustainable Los Angeles: A “Nature’s Services” Approach (Pincet, et al., 2003), found that a 146 acre site with 1,900 trees, “saved \$930,000 in stormwater infrastructure costs.” Given that the St Clair Village woodlands are about half the acreage, we can interpolate that an estimated \$465,000 is saved in stormwater infrastructure costs by protecting the woodlands. However, this may be a conservative estimate since the quantity and density of trees on the St. Clair Village Site substantially exceed the 1,900 trees on the Los Angeles site. The model, using CITYgreen software developed by American Forests, revealed that an “aggressive tree cover scenario” can result in stormwater infrastructure savings of up to \$41,000 per acre. If we use that value to estimate the value of the natural stormwater management function of the 70 acres of woodlands, the public benefit could be as high as \$2,800,000 annually.

AIR QUALITY

Several studies have focused on the pollution control benefits of tree cover. The Los Angeles, CA study (Pincet, et al., 2003) estimated that the value of a typical acre of urban land, under current tree densities, for removal of

ozone precursors, sulfur dioxides, nitrogen oxides and small particulates ranged from \$18 - \$80 per acre. The estimate for denser plantings was \$142 to \$185 per acre. Using these values as a baseline, in the case of St. Clair Village the economic value of the air purifying function of the 70 acres of woodlands can range from \$1,260 to \$12,950. These values provide a sense of the magnitude of the economic and public benefits of the woodlands in terms of air quality. However, we must acknowledge that the naturally occurring density and multiple layers of canopy and understory trees, shrubs and groundcover vegetation of the mature woodlands at the St. Clair site, substantially exceed the density of 1,900 trees over 146 acres in the Los Angeles study area. Therefore, we believe that it is safe to assume that these estimates are extremely low in comparison to what they actually are at St. Clair. A Chicago study, Quantifying Urban Forest Structure, Function and Value: the Chicago Urban Forest Climate Project, concluded that 50.8 million trees in the Chicago area removed 5,575 tons of air pollutants per year (0.22 pounds per tree), and sequestered 315 million tons of carbon per year (12.4 pounds per tree per year). We have not had the opportunity to estimate the quantity of trees on the 70 acres of woodlands. However, this is something that can be done as resources become available.

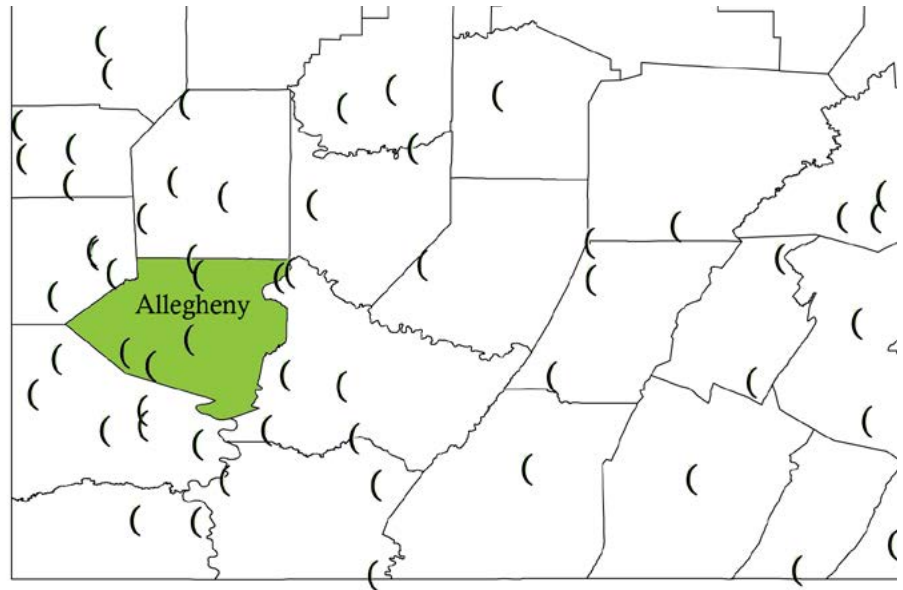
SCENIC CHARACTER OF FORESTS

A 2000 study, Property Prices and Urban Forest Amenities showed that the market commanded a 4.9 percent premium for properties with a view of a forest. This suggests that maintaining natural view sheds has substantial economic value. The Los Angeles study notes that, “creation or purchase of green spaces by local governments are self-financing, as the increase in property values and resulting annual tax revenues would be sufficient to pay off purchases in 15 years”.

SCENIC CHARACTER OF FARMS

‘Farmspotting’ is a tourism term used to promote what is known as agritourism, as defined by the American Farm Bureau Federation:

“Agritourism refers to an enterprise at a working farm, ranch or agricultural plant conducted for the enjoyment of visitors that generates income for the owner. Agricultural tourism refers to the act of visiting a working farm or any horticultural or agricultural operation for the purpose of enjoyment, education or active involvement in the activities of the farm or operation that also adds to the economic viability of the site.”



This map shows the locations of CSA farms in Southwestern PA. There are no CSA drop-off points in the Hilltop Alliance's service area.

Tourists seek out farms to feel in touch with nature, to purchase farm goods, to learn where where food comes from, and feel a connection to what is perceived by the consumer to be a simpler time and way of life. In a 2004 agritourism industry assessment by The Center for Rural Pennsylvania, 75 percent of respondents replied that pleasure / recreation was the reason for visiting a farm. The map below was created from a PA Department of Community Economic Development survey of agritourism enterprises. This study found that the concentration of these activities were clustered in southeastern and southcentral Pennsylvania. The Erie region has some agritourism developed around the wine industry, and Allegheny County holds a small pocket thanks to a few mid-sized family farms that hold seasonal festivals and educational programs for school aged children. These enterprises are located on the county border, and not within the limits of the City of Pittsburgh. Within Pittsburgh, there are many small urban farms of an acre or less, that certainly serve as attractions in their respective communities. However, the scale and scope of the Hilltop Farm is unmatched in the City and has potential to make it a city-wide destination.

BIODIVERSITY

Organic farming best practice includes planting a diversity of crops that serve as hosts for many beneficial predatory insects and pollinators. Organic farming systems rely on this biodiversity to control pests and diseases rather than spray chemicals. While conventional agriculture's reliance on chemical control of weeds has reduced many species' habitat including in the soil, studies have documented the many ways that organic farms actu-

ally increase this biodiversity. Throughout the Hilltop Farm, native species will be planted whenever appropriate, and pollinator gardens will be a common part of the landscape.

The steep slopes surrounding the formerly developed flat land at the site may contain unique conditions for various plants or animals. Northern facing steep slopes create a cool and moist microclimate for several Pennsylvania Species of Special Concern. These conditions may be difficult to replace if disturbed, and do play an important role in harboring the region's biodiversity. The value of biodiversity is difficult to estimate, but does have local and regional value.

STEEP SLOPE PROTECTION

Prohibiting development on the steep slopes surrounding the site will eliminate the need for the long-term maintenance and repair of new infrastructure such as roads and sewers that would be the responsibility of the local government (public). Infrastructure on steep slopes, which are frequently slide prone as well, is more vulnerable to damage from runoff, erosion and landslides. Therefore protecting the steep slopes as permanent green space eliminates the potential future financial burden of public infrastructure maintenance, repair and replacement.

PROPERTY VALUES

A survey conducted for the National Association of Realtors (2001) revealed that 50 percent of the respondents would be willing to pay 10 percent more for a house located near a park or protected open space. Nearly 60 percent stated that if they were in the market for a new home they would be likely to select one neighborhood over another if it was close to parks and open space. Protected open space has a positive impact on adjacent land values. In *The Value of Open Space in Residential Land Use*, Geoghean (2002) found that permanent open space would increase sale prices of the average home in the sample from \$241,000 - \$247,285.

A 2012 study by researchers at the Heinz School of Public Policy at Carnegie Mellon University found that community gardens in Allegheny County have contributed to a five percent annual increase in property values of the adjacent properties. Over five years this increase resulted in \$20,000 of additional tax revenue associated with each garden. Other studies have shown that property values within 1,000 feet of a community garden or urban farm stabilize and in some cases increase in value. These types of activities can draw in new residents, who see the green space and agriculture activities as a community asset, much like proximity to a park.

SOCIAL

The former St. Clair Village housing project is secured by a locked perimeter fence, cutting off access to 180+ acres of green space made up of fields and woods. During the neighborhood assessments, residents articulated that the site is a reminder to them of what was perceived to be a dangerous and difficult part of the community and the land is viewed as 'blighted' and 'wasted' space. As cited in the community assessment portion of the report the community consensus is that repurposing the former St. Clair Village into a multi-use farm and open space would be desirable.

Studies have demonstrated that community gardens are places where people can build social capital and community by sharing networks and bonding with other gardeners. This enables participants in community gardens to be more effective in their home and work lives, and even build the social capital of their families.

The Seasonal Activities at the Hilltop Farm have the potential to become a way to build social cohesion in the St. Clair neighborhood. And each 3'x12' plot at the community garden has the potential to grow between \$200 and \$300 worth of food each season for the plot-holder. At full capacity, the Hilltop Farm will generate more than enough food to feed the existing population of St. Clair.

HILLTOP FARM COMPONENTS

The Hilltop Farm is comprised of five main components: The Farmer Development Program, The Community Supported Agriculture Farm, The Youth Farm, Seasonal Activities, and Community Greenspace. While a Phase II report is recommended to refine some aspects presented in this report, initial research shows the feasibility of the following programmatic concepts and revenue generating activities. Some activities will be run at a loss, with more profitable activities making up the difference to create a revenue neutral business. A description of each component comprises this section.

THE FARMER DEVELOPMENT PROGRAM (FDP)

The Farmer Development (FDP) program will assist individuals wanting to farm in learning the production, business, and marketing skills necessary to eventually operate their own farm. Participants will gain hands-on experience in the field as well as learn to write a business plan. Aspiring farmers will be able to rent prepared growing space, access farming equipment



The Farley Center Farm (Springdale, WI) farmers-in-training participating in agricultural education inside a high tunnel.

and facilities, and are provided education in agricultural production and business management to help them build a profitable farm business. This model allows individuals to limit financial risk while deciding if farming is a viable endeavor for them. After up to three years incubating their farm and paying a fee to access the program, they will graduate off the site.

FDP Products

- Educational programming for new farmers enrolled in the beginning farmer program.
- Educational opportunities for the public.
- Leasing of high tunnel space.



Headwaters Incubator Farm (Orient, OR) participants tend to crops in their incubator plot.

FDP Communications and Marketing Plan

The Hilltop Farm will require support after Phase I to complete a comprehensive market assessment and communications strategy for the proposed activities. This is needed to reach the diversified customer base for its products, which will be defined once the market assessment takes place. Customers should be reached by partnering with other agriculture, neighborhood, economic development, and education organizations to cross-promote the programs and collect contacts for a database. Commu-

nication tools to be developed include social media presence, press kit, full suite of print marketing materials, website, newsletter, and targeted paid advertising initially.

In preparation for that work, the following marketing plan methodologies are recommended for consideration.

FDP Marketing Strategy

The FDP injects a new product into a new market. This type of new farm training program is unique in the region, with the closest counterparts in Cleveland, OH and Emmaus, PA. The FDP will offer access to land and



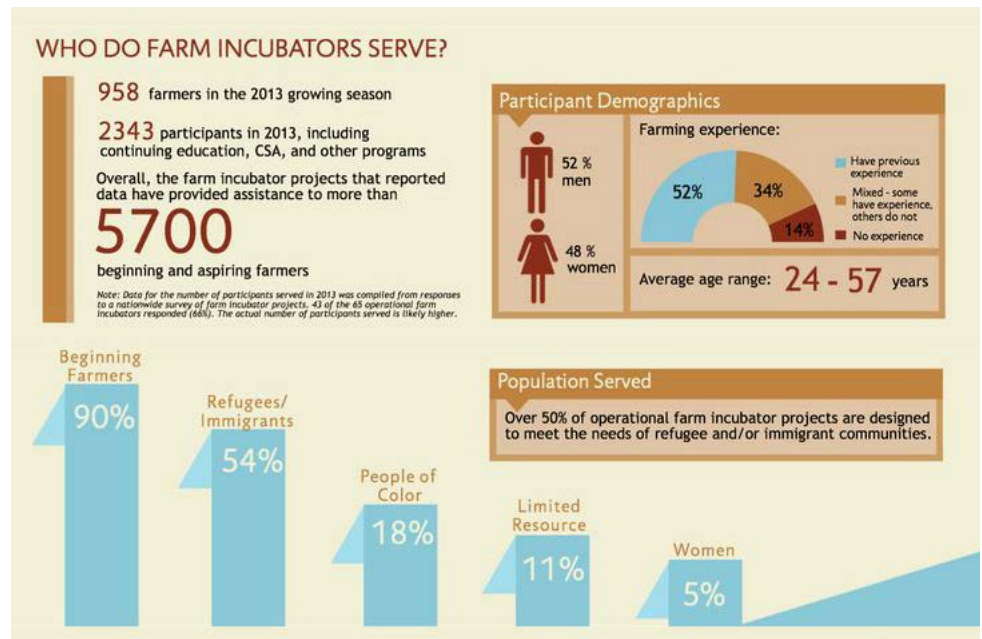
Locations of Incubator Farms in the Eastern part of the United States and Canada, from the National Farm Incubator Training Initiative.

tools at below market rates and include novel horticulture and business planning programs at a depth that is not currently available in Western Pa. There are significant curricula in existence, for example, Penn State Extension's new farmer development program in southeast PA called SEED farm. This FDP has an extensive 3 year or 9 month option to become an organic farmer. Access to land, tools, and equipment is also novel.

The FDP educational program can be structured to maximize human

resources by potentially subcontracting programming to other organizations, such as Grow Pittsburgh and Penn State Extension. The FDP may also explore avenues to engage free expertise for public programming, such as Penn State master gardeners. A volunteer training program could be developed to assist with composting, farm maintenance, and educational programming.

The final educational model will help determine how the program is marketed. In general, agriculture production classes at different scales may be offered to different customers. The enrollees in the FDP will have formal, intensive, and in depth education classes in the cold months, and in the field lessons of ‘what is happening now’ in the growing season. The public may access educational opportunities on similar topics but in a short, one hour free class once or twice a month.



Nationwide data from the National Farm Incubator Project

FDP Staffing

The FDP will need a full time Farm Manager to manage FDP program participants, coordinate educational programs and special events, market the program, manage the facility, farm equipment and communicate with managers of the other Hilltop Farm components. Hilltop Alliance will need to determine if this position is responsible for overall site maintenance and book-keeping, or if some of those responsibilities can be delegated.

FDP Risk Management and Liability

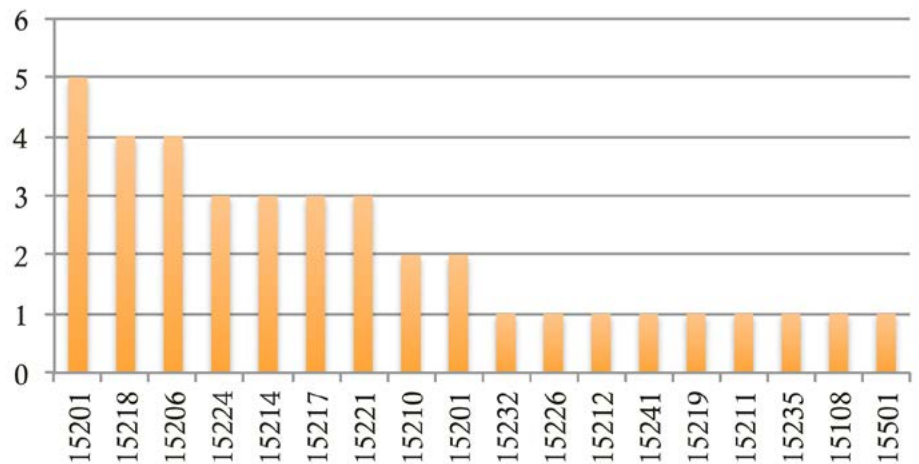
Risk Management is a critical component for any business, and a farm is no

different. The management of Allegheny Land Trust and Hilltop Alliance will need to consult with tax and legal professionals to determine coverage rates and identify the policy holder. It may make sense for the property to have umbrella coverage to protect against trip and fall for all farm components.

Another area of risk management is controlling access to the property, equipment, and structures. Due to the high population density, and the value of farming infrastructure and equipment, farm assets should be secured against vandalism, theft, and accidental injury. This may include investment in fencing, security lighting, sturdy locking buildings for tractor and tools, and high tunnels.

Management of Hilltop Farm can decide if the farm wants to extend crop insurance to participants in the Farmer Development Program, or pass the responsibility on. If coverage is extended, the cost should be bundled into the tuition fee. Crop Liability insurance is commonly purchased to offset any crop failure due to insect, disease, or adverse weather conditions. This insurance protects the anticipated CSA revenue from the sale of the produce, and should be considered for the CSA farm.

Respondents' Zip Codes



The zip codes of the respondents to our Farmer Development Program Survey. This shows the geographic diversity of potential participants in the program.

Because the site will be considered an operating farm, staff employed there will need additional worker's compensation insurance that comes at a higher rate than traditional insurance. It is recommended that the Hilltop Alliance discuss implications with its current insurance provider to determine classifications for these employees and to get a rate quote. Insurance

costs listed in the budget are educated guesses based on Grow Pittsburgh's experience with our own worker's compensation insurance, but should not be read as final numbers.

Outcomes

As stated earlier in the report, over half of US farmers are expected to retire in the next ten years. Starting a farm is prohibitively expensive due to the cost of land and equipment acquisition, as well as the slow timeline to profitability. The FDP will allow individuals the opportunity to develop farming skills in a low risk financial environment with two outcomes: deciding farming is not for them, or, proceeding with a farming career, with a track record of success. Additionally, it creates a high entrepreneurship community by exposing participants to education and experience in running a small start up business. These skills are transferable to any industry, inside and outside of agriculture.

Things To Consider

In a spring 2014 potential participant survey respondents said they would pay up to \$1200 per year to participate in the FDP model. The availability of scholarships for low income participants may be considered in the final education program and budget. Scholarships may be funded by grants in the first few years, and then planned for in the budget once the farm reaches revenue neutral.

Maintenance of the site must be thought through in terms of staffing and cost. The FDP manager's main duty will be to coordinate the educational program and any seasonal events, assist with the marketing of the program, the needs of the participants, and care of the equipment. It may be unrealistic that this individual can provide maintenance to the entire Hilltop Farm. Hilltop Alliance, and the Allegheny Land Trust should explore what the overall site maintenance entails in order to create a realistic management plan.

Again, it is recommended that when funding is secured as part of the initial start up costs for Hilltop Alliance, dollars are included to permit consultation with legal and tax professionals so that the correct level of coverage and risk management.

The ultimate success of FDPs depend on the ability of graduated farmers to succeed on their own land. A robust FDP has assistance in succession planning for graduated farmers, either by transitioning onto land-trusted or publicly owned land, or matching with retiring farmers. Organizations like

FarmLink and Pennsylvania Association of Sustainable Agriculture have services that can be accessed.

Financial Considerations and Budget Narrative

Revenue generated from the FDP will come from tuition paid for by program participants at a cost of \$1200 per person per year, with a maximum enrollment threshold of 17. The above figure illustrates four participants in year 1, 8 in year two, 12 in year three, reaching the maximum of 17 for a maximum revenue of \$20,400 which may be realized in year four. If scholarships are made available, the revenue will decrease. The costs for the FDP program will employ one full-time manager, advertising and program promotion, liability insurance, and utilities. The financial and human resource costs of site maintenance, as well as the farmer and public education programs need to be defined in the next phase to fill in the informational gaps in the budget.

Year	<u>one</u>	<u>two</u>	<u>three</u>	<u>four</u>
farmer educational programming	\$ 4,800.00	\$ 9,600.00	\$ 14,400.00	\$ 20,400.00
total revenues	\$ 4,800.00	\$ 9,600.00	\$ 14,400.00	\$ 20,400.00
Variable Costs				
advertising, web site	\$ 1,000.00	\$ 1,000.00	\$ 1,000.00	\$ 1,000.00
office	\$ 2,000.00	\$ 2,000.00	\$ 2,000.00	\$ 2,000.00
farmer educational fees / supplies				
public educational fees / supplies				
total variable costs	\$ 3,000.00	\$ 3,000.00	\$ 3,000.00	\$ 3,000.00
Fixed Costs				
insurance, liability	\$ 1,200.00	\$ 1,200.00	\$ 1,200.00	\$ 1,200.00
manager	\$ 39,000.00	\$ 42,000.00	\$ 44,000.00	\$ 46,000.00
utilities	\$ 1,800.00	\$ 1,800.00	\$ 1,800.00	\$ 1,800.00
Total Fixed Costs	\$ 42,000.00	\$ 45,000.00	\$ 47,000.00	\$ 49,000.00
Total Costs	\$ 45,000.00	\$ 48,000.00	\$ 50,000.00	\$ 52,000.00
Project Net	\$ (40,200.00)	\$ (38,400.00)	\$ (35,600.00)	\$ (31,600.00)

The proposed budget for the Faremer Development Program.

THE COMMUNITY SUPPORTED AGRICULTURE (CSA) FARM

The second component of the Hilltop Farm is a Community Supported Agriculture, or CSA, Farm, which will sell weekly boxes of produce during the growing season to residents of the Hilltop Communities. This business model will employ a full time experienced farmer to grow the business to 200 shares over four years. Some of the shares will be made available at below-market rates to ensure participation by a cross-section of residents, regardless of income.

CSA Marketing Strategy

Shares will be sold at a recommended price point of \$600 per year, with production reaching 200 shares per season in year four, at a growth rate of 50 shares per year.

CSA Marketing Strategy

At present, there are no CSAs with drop points in the Hilltop communities, and residents of these neighborhoods and the South Side will be the focus of the initial CSA share offerings, which are slated to grow to 200 shares at \$600 per share by year four. Competition will come from residents who may subscribe to another CSA and pick up at another location. Competition will also come from those who may shop at farmers market. The market assessment phase can identify the significance of this competition, the interest of residents in participating as a CSA customer, and define a market penetration strategy. The goal will be to capture some customers already involved in a CSA model, while attracting interest from the general population who have not accessed food in this way.

The CSA will develop its customer base first in the Hilltop communities where there are currently no CSAs with drop sites. After existing residents have the first option to buy in (with some at subsidized rates), marketing of the shares can be extended to other Pittsburgh neighborhoods. This component is a particularly critical component of the Hilltop Farm from a revenue generating perspective as income from the CSA has the potential to make the farm revenue neutral, and help to pay for two full time managerial positions: the FDP manager and the CSA Manager.

The revenue from CSA share sales will cover salary for CSA and FDP managers, seasonal labor, production costs of the two operations, and equipment maintenance. The Hilltop Farm management can decide to sell produce in other high value markets such as farmers markets and restau-

rant sales. Additional revenue streams should be considered to make up for any shortfall.

CSA Staffing

The CSA will need to employ a full time Farm Manager who will be responsible for the CSA planning, production, share distribution, and marketing.

CSA Risk Management and Liability

Crop Liability insurance is commonly purchased to offset any crop failure due to insect, disease, or adverse weather conditions. This insurance protects the anticipated revenue from the sale of the produce, and should be considered for the CSA farm.

Any risk attributed to trip and fall should be covered under the umbrella protection covering the whole farm.

Outcomes

The CSA Farm will ultimately create the revenue stream to create a revenue neutral operation, ideally, by year four. It will also bring significant fresh, local produce into the Hilltop neighborhoods.

Things to Consider

- Soil building is critical in order to achieve yields sufficient to supply a 200 share CSA.
- Market trends, variable production costs, and other factors will need to be considered to determine if a \$600 annual fee is the correct price.
- If a percentage of subsidized CSA shares will be made available to SNAP or other low income customers, the revenue offset must be identified.
- A 200 share CSA will need labor for production, processing, marketing, packaging, distributing, and book keeping. Additional human resources may be needed to accomplish all of these tasks.

Financial Considerations and Budget Narrative

The CSA Farm is the revenue generating component of the Hilltop Farm initiative, and net revenue, when realized will offset the costs associated with the FDP component. CSA shares will be sold at a price of \$600 each, starting with 50 shares in year 1, 100 shares in year 2, 150 shares in year 3,

Year	one	two	three	four
shares (@ \$600 each)	\$ 30,000.00	\$ 60,000.00	\$ 90,000.00	\$ 120,000.00
Total Revenue	\$ 30,000.00	\$ 60,000.00	\$ 90,000.00	\$ 120,000.00
Community Supported Agriculture Farm				
advertising, web site	\$ 1,000.00	\$ 1,000.00	\$ 1,000.00	\$ 1,000.00
crop insurance	\$ 200.00	\$ 200.00	\$ 300.00	\$ 300.00
distribution	\$ 1,300.00	\$ 2,600.00	\$ 3,900.00	\$ 5,200.00
fertilizer	\$ 600.00	\$ 600.00	\$ 600.00	\$ 600.00
fuel, oil	\$ 400.00	\$ 400.00	\$ 400.00	\$ 400.00
high tunnel supplies	\$ 400.00	\$ 800.00	\$ 1,200.00	\$ 1,200.00
irrigation supplies				
labor	\$ 8,100.00	\$ 8,100.00	\$ 16,200.00	\$ 16,200.00
office	\$ 600.00	\$ 600.00	\$ 600.00	\$ 600.00
packaging	\$ 115.00	\$ 425.00	\$ 575.00	\$ 850.00
pest control	\$ 200.00	\$ 400.00	\$ 600.00	\$ 800.00
plastic mulch	\$ 400.00	\$ 800.00	\$ 1,200.00	\$ 1,200.00
processing	\$ 100.00	\$ 150.00	\$ 200.00	\$ 300.00
professional services				
repairs	\$ 500.00	\$ 1,000.00	\$ 1,500.00	\$ 2,000.00
seeds / plants	\$ 400.00	\$ 800.00	\$ 1,200.00	\$ 1,600.00
storage	\$ 100.00	\$ 150.00	\$ 200.00	\$ 300.00
supplies	\$ 125.00	\$ 300.00	\$ 500.00	\$ 500.00
Total Variable Costs	\$ 14,540.00	\$ 18,325.00	\$ 30,175.00	\$ 33,050.00
Fixed Costs				
insurance, liability	\$ 500.00	\$ 500.00	\$ 500.00	\$ 500.00
manager	\$ 39,000.00	\$ 42,000.00	\$ 44,000.00	\$ 46,000.00
organic certification	\$ 700.00	\$ 700.00	\$ 700.00	\$ 700.00
rents: land, high tunnel				
utilities	\$ 1,800.00	\$ 1,800.00	\$ 1,800.00	\$ 1,800.00
Total Fixed Costs	\$ 42,000.00	\$ 45,000.00	\$ 47,000.00	\$ 49,000.00
Total Costs	\$ 56,540.00	\$ 63,325.00	\$ 77,175.00	\$ 82,050.00
Project Net	\$ (26,540.00)	\$ (3,325.00)	\$ 12,825.00	\$ 37,950.00

The proposed budget for the CSA Farm.

and 200 shares in year four, for a maximum revenue of \$120,000. The project net line shows the bottom line gain / loss of this component. Additional gains may be realized by selling, at a profit, produce that is surplus after the needs of the CSA are met. This can be accomplished via farm stand sales, farmers markets, or direct to restaurant. Seasonal labor has been built in to assist the manager in properly running all aspects of planning, production, harvest, processing, distribution, and marketing of this component.

THE YOUTH FARM (YF)

Providing a constructive opportunity for youth as part of the proposed Hilltop Urban Farm was a key output and recommendation from both the steering committee and the public in Phase I, as is mentioned earlier in this report. As a result, we are recommending the establishment of a Youth Farm (YF) on a small portion of the site (approximately ½ acre) in partnership with Lighthouse Cathedral, a local church with a longstanding presence in the Hilltop that already provides a variety of social services to the St. Clair community, including existing youth and community engagement programs.



Participants in the Braddock Youth Project farming at Grow Pittsburgh's Braddock Farms in Braddock, PA.

Under the supervision of the Lighthouse Cathedral, youth from the Hilltop communities will learn life skills, food production, business management, and teamwork while working together to grow and sell food through a Farm Stand.

More planning is needed to shape and determine the structure and program details of the Youth Farm component of the Hilltop Farm. Given Lighthouse's experience with youth programming in the community, the specific program design should be developed in partnership with them, with additional support provided by Grow Pittsburgh based on our experience with youth programming.

Grow Pittsburgh has established and successfully managed a summer youth program, Urban Farmers in Training (UFIT), at our largest production site in Braddock, PA for seven years now. We are basing our recommendations for this project in part on this model, though the interests of the community differ, particularly in the number of youth they hope to reach.

YF Programming

We propose a seasonal program for youth at the farm, managed by a part-time, seasonal Youth Farm Manager, that would incorporate a variety of age groups and allow for significant numbers of youth to visit the farm over the course of a year. Unlike Grow Pittsburgh's UFIT program, which employs 6-8 young people on a regular basis, Lighthouse Cathedral is interested in reaching as many youth as possible over the course of the season. As a result we suggest that a series of planned activities take place at the farm site that will enable many kids to visit. These activities could include but are not limited to:

- Field trips scheduled for different age groups to the farm over the course of the season that enable lessons to be taught by the farm manager related to the importance of growing food and its effects on mind and body
- Opportunities to harvest food from the farm and prepare healthy meals with it
- Opportunities for a smaller number of youth to work on the farm on a regular basis as an employment and learning opportunity, particularly connected to selling food at a local farm stand

YF Products

- Sales of produce from the Farm Stand
- Sales of produce to the Greater Pittsburgh Community Food Bank

YF Marketing Strategy

Produce grown at the youth farm would be sold, with support from the youth, at the community farm stand. There is potential to have this produce sold to low income residents via acceptance of SNAP and nutrition vouchers, as well as at-cost contract growing with the Greater Pittsburgh Community Food Bank.

The YF can market its youth farm programming via Lighthouse Cathedral

of Pittsburgh 's existing community outreach. It can also increase human resources by subcontracting management and educational pieces to Lighthouse Cathedral of Pittsburgh. Lighthouse Cathedral of Pittsburgh can then, in turn offer train-the-trainer opportunities to recruit volunteers to assist in the YF activities.

YF Staffing

The part-time, seasonal Youth Farm Manager would be employed by the Lighthouse Cathedral. The position will require an individual with youth programming and gardening experience.

YF Risk Management and Liability

Product Liability insurance for Youth Farm produce sales (or any sales of food items, especially those of the value added nature) is suggested to protect Hilltop Farm from any potential litigation resulting from claims of illness or injury resulting from consumption of Hilltop Farm products.

Crop Insurance and Accident and Injury must be determined as an umbrella policy to the property, putting the onus of coverage on each component.

YF Examples

A wide variety of youth farms exist around the country, with a diverse set of structures and goals. This is why it will be important for the Hilltop Alliance to continue working with Lighthouse Cathedral and groups like Grow Pittsburgh to identify the specific focus and set up of the potential YF at the St. Clair Village site. Two successful youth farm examples from other parts of the country include:

The Food Project: Boston, MA

Since 1991, The Food Project has built a national model of engaging young people in personal and social change through sustainable agriculture. Each year, they work with over 150 teenagers and thousands of volunteers to farm on 40 acres in eastern Massachusetts (this is obviously significantly larger than what is being considered in this proposal). A hallmark focus of their program is identifying and transforming a new generation of leaders by placing teens in increasingly responsible roles, with deeply meaningful work.

Food from Food Project farms is distributed through community supported agriculture programs and farmers' markets, and donated to local hunger relief organizations. The young people working in their programs participate



A youth participant of the Urban Roots farm program in Austin, TX.

in all of these distribution streams, giving them valuable job experiences and a personal connection to the food system and issues of food justice.

In addition to producing and distributing food, The Food Project helps others grow their own food through community programs and provide training resources based on their experiences, and could be considered as a resource for the youth component of this project in the future.

Urban Roots: Austin, TX

Urban Roots uses sustainable agriculture to transform the lives of young people and increase access to healthy food in Austin. Founded in 2007, Urban Roots provides paid internships to Austin youth, age 14-17, to work on a 3.5 acre urban sustainable farm in East Austin. Each year, they have a goal of growing 30,000 pounds of produce with the Urban Roots community of youth, community volunteers, and staff. They donate 40 percent of their annual harvest to local soup kitchens and food pantries, and sell the other 60 percent at farmers' markets, through a Community Supported Agriculture Program, and wholesale.

During a 25 week spring and summer youth program, youth Interns develop essential life and job skills while growing food for the Austin community. Each fall Urban Roots hires 24 youth Farm Interns, three youth Assistant Crew Leaders, and three youth Agriculture Interns to work with them for the upcoming program year. Additionally, youth Interns receive a variety of workshops on sustainable agriculture, healthy lifestyles, life and job skills, and food justice issues, including hands-on service at hunger relief organizations. Urban Roots youth Interns grow into some of Austin's youngest leaders, advocating for a sustainable and healthy food system for all.

YF Outcomes

The YF outcomes will focus on building life skills and positive experiences for the youth in the community. Growing food is a mental, physical, and cooperative process which engages other individuals and nature, all of which provide significant youth development. The program will include business and entrepreneurial training, skills which are transferable to any job or career the participants may pursue. The produce grown on the YF will enter the neighborhood via an at cost model, making fresh, local, nutritious produce available to community members.

YF Funding

Long-term funding for the Youth Farm will be needed in order to ensure its longevity. In addition to the yearly salary of a Youth Farm Manager, there

EXPENSES	
<i>Personnel Expenses</i>	
PT - Youth Supervisor	12,000
Payroll Taxes	1,200
Worker's Compensation Insurance	1,000
Total Personnel Expenses	14,200
<i>Supplies, etc</i>	
Program Supplies	4,000
Catering and Hospitality	2,000
Field Trip Entrance Fees	300
Total Supplies, etc	6,300
<i>Administrative</i>	
Administrative Overhead	3,075
Total Administrative	3,075
TOTAL EXPENSES	23,575

The proposed budget for the Youth Farm.

will be annual supply costs for the site as well. A decision will also need to be made regarding employment of youth. If the intent of the program is to employ at least some youth, it is recommended that City Summer Youth Employment funds be sought. The Birmingham Foundation, a local funder dedicated to supporting health and human services efforts in South Pittsburgh, has expressed interest in learning more about the program and is a potential future supporter.

YF Things to Consider

- Youth Farm Stand location - This farm stand could be located in an existing structure next to the St. Clair Village site that used to house a convenience store that served residents of the neighborhood.

AGRITAINMENT: SEASONAL ACTIVITIES (SA)

The management team may determine in future Phases to hold Seasonal Activities, which may include spring and fall Activities, property and facility rental for special events and fundraisers, such as on-farm dinners or weddings. Fall Activities are the given example for the purposes of this report.

SA Products

Fall Activities are a common revenue stream for diversified farms. The farm will purchase the seasonal materials (pumpkins, hay bales, corn stalks) rather than grow the items. This will necessitate developing, in advance, a relationship with a farm in the region in order to ensure the ability of the Hilltop Farm to purchase the fall festival agricultural supplies wholesale. At a fall festival the farm is made open to the public for a fee for special events, such as:

- hay rides
- corn stalk maze
- pumpkin patch
- corn pool
- seasonal food sales such as cider, kettlecorn

SA Marketing Strategy

The fall festival is scaleable to meet the needs of the organization. Holding the festival will make the farm accessible to the public, and may help develop a sense of community. The event will be marketed as a family friendly event, held over several weekends. The public will access the farm via ticket sales, with the potential to purchase other seasonal products such as pumpkins, once on site. Hilltop Alliance may wish to pursue sponsorship to offset associated costs of the event. The event can be advertised via social media, print, mailers, word of mouth, and targeted print ads and write ups in community calendars.

SA Staffing

This will be part of the job description of the FDP, CSA, and YF Farm Managers. Volunteers and temporary paid staff will be needed to manage the event while it is open to the public.

SA Risk Management and Liability

Because the public will be invited onto the property, along with students, volunteers, and youth, Trip and Fall insurance is suggested to protect the Hilltop Farm from any potential litigation resulting from accident or injury while on site.

SA Outcomes

The community engagement process illustrated many sensitivities to use of this land. Having seasonal festivals would make the operations of the farm transparent to long time community residents. It would also serve to introduce the components to a larger audience, potentially drawing in participants and customers.

<u>Agricultural Supplies</u>		
straw bales	\$4.00	800.00
pumpkins	\$0.55	16,500.00
corn stalks	\$8.00	3,200.00
corn pool		1,200.00
ag supply total		21,700.00
<u>Other Expenses</u>		
supplies		2,700
promotion		3,200
assembly		1,800
maintaining		1,300
disposal		720
insurance		1,200
staffing		10,800
		21,720
Total Expenses	43,420.00	

The proposed budget for a fall festival, an example of a Seasonal Activity that could take place at the Hilltop Farm.

SA Things to Consider

- Agritourism can be a significant revenue generator. However,

profit margins may decrease significantly if all festival items are bought in, in which case sponsorship could help offset costs.

- If products are to be bought in (pumpkins, hay, corn, etc.) relationships with farms that sells these items wholesale should be established to ensure supply.
- Risk management is especially important here. Be sure to talk to insurance providers if this component is added on after initial coverage is purchased.

SA Financial Considerations and Budget Narrative

The expenses of a fall festival in this figure represent an event that runs for 7 to 12 hour days. All items for the festival will be purchased at wholesale costs, and include temporary labor to help run the festival. This budget is scalable in terms of length, size, and may be sponsored to mitigate costs.

COMMUNITY GARDEN

The final component of the food-growing activities at the Hilltop Farm is the community garden (CG). A community garden is only one example of the community greenspace options available to the Hilltop Alliance, which also includes woods trails and a community park. However, we thought the community garden deserved to be included amongst the revenue-generating farm components because while community gardens do not generally earn revenue, if managed properly, they do have the possibility of being at least revenue-neutral. Furthermore, a community garden at the Hilltop Farm can be a way to amplify the community benefits of the site, while bringing the community into the farm itself.

CG Products

Community gardens generally fall into one of two categories. In an allotment-style community garden, the primary product is the garden plots, which are rented for generally under \$.10 per square foot. Access to water and community tools is generally included in this price. Other gardening components, like compost and seeds are sometimes provided, or purchased collectively.

An alternative to the allotment garden is the community farm, where the land is farmed collectively and the berries, herbs, and/or vegetables are shared amongst all the gardeners. In this case, gardeners may pay a mem-

bership fee to cover the cost of water and gardening materials.

It is also possible for a community garden to be a blend of these two models. In either case, the key is to provide both quality infrastructure and a positive environment for growing food.

CG Marketing Strategy

Generally, community gardens are most successful when the majority of the members can walk to the garden. Therefore it is recommended that the residents of St. Clair neighborhood and nearby Mt. Oliver (city) be targeted with door-to-door outreach. A diversity of messages will be most effective: those living in rentals and apartments may need a place to grow food, while residents who have vegetable gardens in their yards may be attracted by the opportunity to get to know neighbors and learn new gardening techniques. We recommend that a minimum of 3 unrelated individuals be identified who are committed to being the core organizers for the garden before plans to build a garden move forward.



Bed-holders at the nearby Mt. Oliver Borough Community Garden. In its first season, there is already a waitlist for this 66 bed garden. More than 1/2 of the bed-holders are refugees from Bhutan or Nepal.

CG Staffing

Often community gardens are all-volunteer efforts, but having an anchor non-profit organization such as the Hilltop Alliance to help secure donations, provide technical assistance, and provide meeting space can be beneficial during the start-up phase, and potentially through the life of the project. It is also helpful but not necessary to have paid individuals responsible for maintaining the grass in and around the garden area.

As with all-volunteer projects, burnout is a real risk in community gardens. Ensuring that the lead garden organizers are appropriately delegating tasks and that garden participants are lending their energies when asked is critical to the long-term sustainability of the garden.

CG Risk Management and Liability

Liability insurance is available for community gardens that provides coverage for the duration of the growing season. The cost changes based on how many gardeners will be present and the square footage of the garden space. Insurance can be the single highest cost for a community garden, which is then transferred to the gardeners in the form of higher dues or plot rental fees. If it is possible for the community garden to be umbrella'd under a larger policy, that will allow the garden fees to remain affordable.

CG Outcomes

The community garden has potential to increase the healthy food access of the participants themselves, as well as that of their family members and neighbors as excess produce is shared. Community gardens also create community gathering spaces where people share information and plan ways to improve their community. In this specific case, a community garden can be an important way for community members to have buy-in and direct control over a portion of the larger Hilltop Farm project.

CG Funding

The community garden will need start-up funding to pay for the initial cost of the raised beds, fencing, water line, tools, and a storage shed. Grow Pittsburgh's City Growers program provides the materials and technical support necessary to start a community garden, and its Sustainability Fund helps gardens implement improvement projects once the garden is established. The City of Pittsburgh Love Your Block program provides \$2,000 Home Depot gift cards to community greening projects. Local businesses, job training centers, and community residents can also be an important

source of donations of materials or in-kind services. After the initial build-out of the garden is completed, with the proper fee structure, the garden should be able to be self-funding.

Program Supplies		
Fencing	deer net fence	\$3,200.00
Water	water connection	\$2,500.00
	buried PVC pipe with two spigots	\$500.00
Beds	framing	\$1,500.00
	soil	\$700.00
Shed	wooden, custom made	\$4,000.00
Tools	assorted non-motorized	\$600.00
Signage	name and partner signs	\$750.00
Compost bin	wire lined three bin system	\$500.00
	Total Program Supplies	\$14,250.00

The proposed budget for a 15 bed Community Garden.

FUNDING THE HILLTOP FARM

Suggested Funders

Private funding will be needed for the initial start up costs associated with building out the farm site, and some long-term funding will be required to continue the day-to-day activities of the CSA farm, farm incubator and youth farm.

Local Opportunities

Several local foundations could be interested in supporting the Hilltop Farm Project. The following entities have either expressed interest or have historically supported food and agriculture projects:

- Colcom Foundation
- Birmingham Foundation
- Richard King Mellon Foundation
- Heinz Endowments
- McCune Foundation
- The Pittsburgh Foundation

There are also several county-funded programs that could be investigated as potential funders for this project.

Corporate Opportunities

Opportunities exist at the state level to encourage corporate entities to contribute to projects of this nature and receive significant reimbursement in tax credits. Programs such as the Neighborhood Assistance Program (NAP) should be explored in partnership with local corporations who might be interested in being associated with the farm. Corporations who could be approached in the future include:

- American Eagle Foundation
- Bayer Corporation
- Eat n Park Corporation
- Equitable Gas

National Opportunities

At the national level, it is unlikely that the project will be able to attract funding until some progress has been made in building out the site and beginning programming. However, after a few successful years of work, the Hilltop Farm Project could be an ideal candidate for a USDA Beginning Farmer and Rancher grant or Community Food Project grant. It is possible that this project could be rolled into a larger request developed by Grow Pittsburgh and other local partners, including Penn State and the Pennsylvania Association for Sustainable Agriculture (PASA).

The USDA Beginning Farmer and Rancher program started in 2008 and as a result of the Agriculture Act of 2014, it provides \$20 million per year for eligible projects across the country from 2014 through 2018. The reasons for the renewed interest in beginning farmer and rancher programs are: the rising average age of U.S. farmers, the 8 percent projected decrease in the number of farmers and ranchers between 2008 and 2018, and the growing recognition that new programs are needed to address the needs of the next generation of beginning farmers and ranchers. If the Hilltop Urban Farm Incubator is successful, it could be an ideal candidate for these funds in a few years, as these funding sources have funded projects like this in the past.

The USDA Community Food Project grants provide \$5 million annually to projects that support the following:

- Meet the food needs of low-income individuals through food distribution, community outreach to assist in participation in Federally assisted nutrition programs, or improving access to food as part of a comprehensive service

- Increase the self-reliance of communities in providing for the food needs of the communities
- Promote comprehensive responses to local food access, farm, and nutrition issues
- Meet specific state, local or neighborhood food and agricultural needs including needs relating to: equipment necessary for the efficient operation of a project; planning for long-term solutions; or the creation of innovative marketing activities that mutually benefit agricultural producers and low-income consumers.

Several aspects of the Hilltop Urban Farm proposal would fit nicely within these requirements, if successful.

ESTABLISHING THE FARM

SHORT-TERM GOALS:

- Secure land through purchase of land by Allegheny Land Trust.
- Secure funding for initial creating of the farm including infrastructure development, supplies, and staff.
- Conduct in depth market analysis regarding farmer development program.
- Conduct a Phase 1 environmental review, if necessary
- Conduct focused soil testing of the proposed agricultural areas to assess if there is any soil contamination present.
- Begin building soil in the sections of the site to be used for agriculture.
- Build the structures and farm infrastructure.
- Develop operational and master marketing plan for all of the Hilltop Farm Activities.
- Formalize relationships between program delivery partners, develop education curriculum, and delivery mechanisms.
- Define how the space will be accessed by the public (seasonal activities, free education, community garden).
- Hire Hilltop Farm Development Operations Manager and CSA Farm Manager.
- Register farm with Department of Welfare and PA Department of Agriculture to accept SNAP benefits, WIC and other nutrition vouchers.

MEDIUM-TERM GOALS:

- Recruit first set of entrepreneurs into the new Farmer Development Program.
- Start CSA production marketing and sales: 50 shares in year one, 100 shares in year two, 150 shares in year three, 200 shares in year four.
- Incubate at least four new farm businesses per year, with first cohort graduating in year three.
- Open the Farm Stand for business to residents of all income brackets

and at subsidized prices to SNAP / EBT, WIC and other nutrition program participants.

- Sell Youth Farm produce, at production cost, to the Greater Pittsburgh Community Food Bank.
- Explore agroforestry options in the wooded hillside.

LONG-TERM GOALS:

- Achieve financial sustainability through revenue generating activities including: CSA sales, on farm agritainment (seasonal Activities, event rentals), and participants in the farmer development program.
- Provide conservation of the land via Allegheny Land Trust's Policies, which has numerous ecological benefit including mitigating stormwater runoff, hillside stabilization, and a green space preservation for current and future residents.
- Add small livestock to the operation with bees and chickens.
- Be a national model for urban land re-use.
- Increase property values and quality of life for Hilltop Residents.

APPENDIX 1 GLOSSARY OF TERMS

agricultural employee - an employee employed in activities which are included in the definition of “agriculture” in section 3(f) of the Act (see § 780.103), and who is employed in these activities with sufficient regularity or continuity to characterize him as a person who engages in them as an occupation. Isolated or sporadic instances of engagement by an employee in activities defined as “agriculture” would not ordinarily establish that he is an “agricultural employee.” His engagement in agriculture should be sufficiently substantial to demonstrate some dedication to agricultural work as a means of livelihood.

agroforestry - or agro-sylviculture is a land use management system in which trees or shrubs are grown around or among crops or pastureland. It combines agricultural and forestry technologies to create more diverse, productive, profitable, healthy, and sustainable land-use systems.

agritainment - Agritainment and agritourism refers to an component at a working farm, ranch or agricultural plant conducted for the enjoyment of visitors that generates income for the owner. Agricultural tourism refers to the act of visiting a working farm or any horticultural or agricultural operation for the purpose of enjoyment, education or active involvement in the activities of the farm or operation that also adds to the economic viability of the site.



CSA - (see picture) a CSA also refers to a particular network or association of individuals who have pledged to support one or more local farms, with growers and consumers sharing the risks and benefits of food production.

community economic development - Community Economic Development (CED) is a field of study that actively elicits community involvement when working with government, and private sectors to build strong communities, industries, and markets

direct marketing - common in local food systems, when farmers sell directly to consumers.

enterprise budget - a budget for each revenue generating piece of a business.

farm stand - a roadside structure where farm products are sold directly to consumers.

farmers market - a pop up market (often weekly, and seasonal in PA) where farm products are sold directly to consumers.

feasibility study - a study to identify if a project has enough merit to proceed to a business plan.



high tunnel - (see picture) also known as a polyhouse, hoop greenhouse or hoophouse, or poly tunnel, is a tunnel structure made of polyethylene plastic used to extend the growing season

incubator farm - a farm where start-up assistance to growers are available for a fee and provides new farmers with access to land and tools, and education around the production, sales and marketing of food.

market analysis - a study to determine the level of demand for a product.

market channel - where goods are sold, farmers markets, grocery stores, and restaurants are examples in the food sector.

retail sales - sale of food goods through stores.

revenue neutral - The point at which a business reaches a zero balance for expenditures and income.

risk management - (in business) the forecasting and evaluation of financial risks together with the identification of procedures to avoid or minimize their impact.

shared kitchen incubator - approved for commercial production• start-up assistance to value-added producers and food entrepreneurs• guidance in commercial food processing• education/support: – business planning and management – sources of financing – marketing and sales – distribution

shared commercial kitchen - A facility set up for commercial food production that is available to multiple users (tenants) on an assigned schedule.

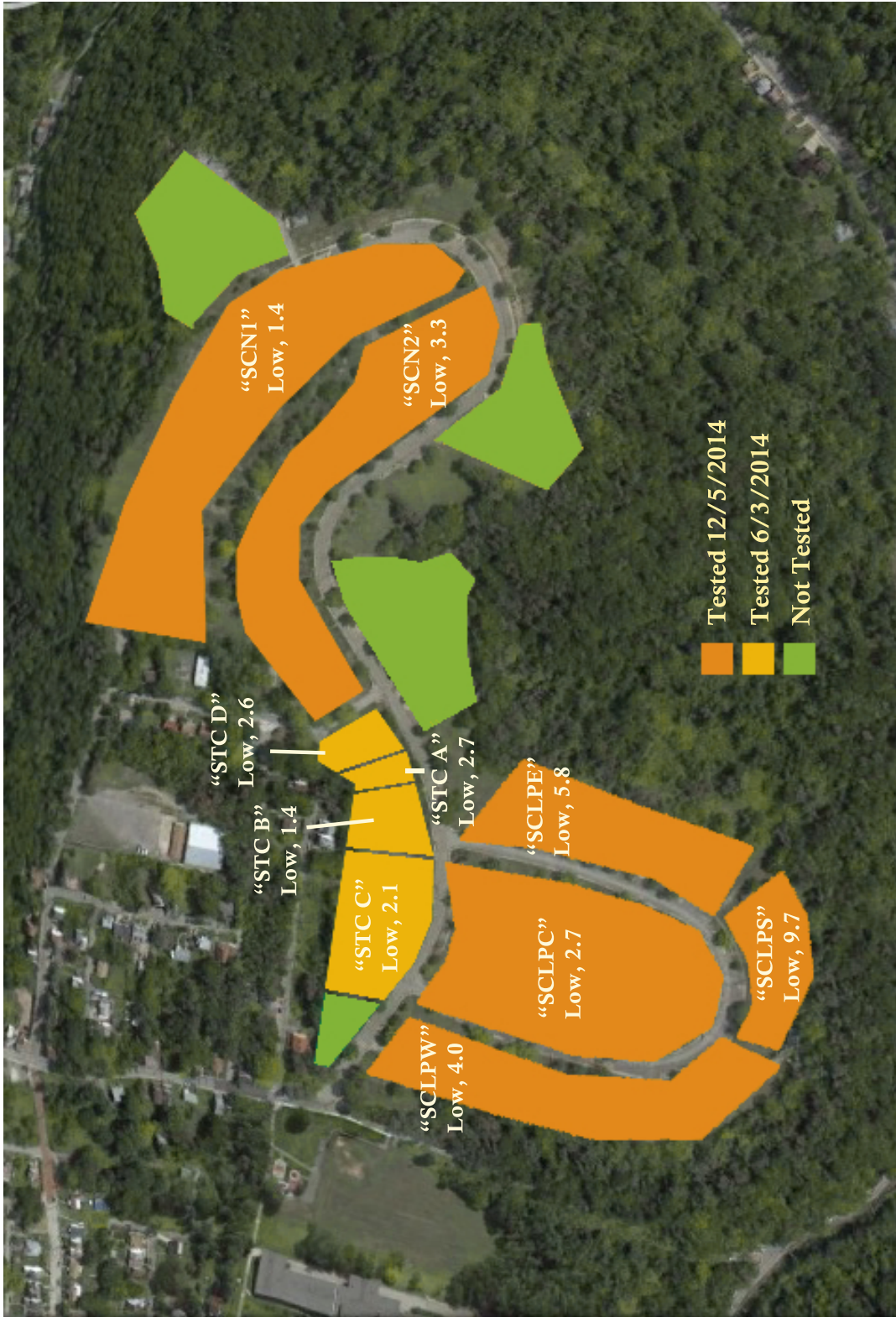
social capital - the networks of relationships among people who live and work in a particular society, enabling that society to function effectively.

value-added - (see picture) the amount by which the value of an article is increased at each stage of its production, exclusive of initial costs. In food, creating sauce or salsa from tomatoes is adding value.

wholesale - the selling of goods in large quantities to be retailed by others



APPENDIX 2 SOIL TEST RESULTS



This image shows the soil testing conducted at the former St. Clair Village site by Grow Pittsburgh. The lead results for each sample are indicated. In all cases, the results were low, with the extracted lead between 1.4 and 9.7 mg/kg.

Samples were taken with a 2' soil probe on two occasions. For each sampled area (for example "SCN1"), Grow Pittsburgh took 10-12 random samples to a depth between 5 in. and 1 ft.. All the testing was completed by the University of Massachusetts Soil & Plant Tissue Testing Lab. The complete reports are on file with the Hilltop Alliance and Grow Pittsburgh.

APPENDIX 3

FEBRUARY 20, 2014 COMMUNITY MEETING FEEDBACK

The chart below and on the next pages summarizes the sticky note comments from the public meeting on February 20, 2014.

Community Greenspace	29 Concerns	33 Opportunities
4		
7	maintenance - who's responsible?	6 year-round greenhouse for community use
4	safety	2 playground
2	what about labor - employees, volunteers	2 community gardens with park and picnic area
1	organic or non-organic chemicals involved?	1 picnic shelter and meeting area, playground, courts (basketball court, field)
	lighting	1 water: ponds, still fountains
	vandalism	1 car-free strolling
	how do you get this to work in our neighborhood? - we typically protect ourselves from each other	1 raingarden/bioswale education space - CSO connection
	community garden operating costs	1 herb gardens
	adds nothing to tax rolls, adds no new residents	connection to SS river trail
	who decides what food to grow?	walking paths
	nice idea, but not very new and exciting	recreation opportunities
	concert venue	opportunities for community members to interact
	already close to another park	pavilion or rent-able space for picnics, weddings, etc
	has the community shown interest in participating in proposed greenspace?	most important, a beautiful place
	buildings must be traditional city style - like Venice, not US Cities	flower garden, benches, quiet space
	great space for children, families and education	a new City park, like Schenely or Frick
		typical park, benches, playground, low-maintenance plantings
		Can Arlington Heights development engage & benefit as/through an educational or community opportunity?
		job opportunities for residents
Farm Incubator	27 Concerns	56 Opportunities
15		
3	cost to start and run, cost of training	5 organic farming
3	how would it benefit the immediate community? would benefit outsiders	5 potential for linkage with local restaurants and micro-businesses
2	vandalism	4 honey bees
2	has there been demonstrated interest in this? is there a market?	3 innovative public-private partnership
1	water source	3 dairy farm - goats, sheep
	security of individual sites	2 involving youth
	would need a lot of coordination or full-time manager	2 Cleveland example
	how much of an input would the residents have?	2 training opportunity for PPS/Arlington students
	what is "low cost" to lease?	1 long-term leases for orchards
	soil quality	1 I would like to lease a plot
	food safety	I'm interested in being the full-time manager
	farm incubator is business model - don't necessarily cater to education and youth involvement	grant possibilities for people who can't afford the lease
	overall aesthetics is important - not like community garden on Forbes Ave	neighbors get first priority
	people may not respect the rules and contaminate others plots with conventional pesticides	love how it distributes the ownership
	what happens if plot isn't maintained?	great opportunity for entrepreneurs
	specific idea vs. general use - ID the program up front	build in job training, leadership development, etc for low income families?
		innovative public-private partnership
		scalable model
		nursery for food coop
		retail of farm produce
		bartering
		connect with craft beer, whiskey distilleries
		greenhouse building
		worm gardens

				micro-climate simulations - partial shade, soggy soil, steep acreage
				animals
				will rent out my goats to clear empty plots
				non GMO
Agritainment	13	14 Concerns	50 Ideas	
	4	Would it really draw? May be difficult to attract BBB type crowd to the Hilltop	9	U-Pick berries
	3	Traffic	4	Christmas tree farm - cut your own
	2	Not inclusive to all - should be free and open to as many as possible	3	Potential good outdoor programs for families and children
	2	security	3	Pumpkin farm - children make and cultivate
		Negative impact on neighbors	2	Festivals, classes
		Advertising cost	1	Horse stables
		Parking	1	Hosting concerts or theater
			1	orchards - blossoming trees viewing, cycling
			1	children health program opportunity
			1	friendly animals, sheep (small scale wool production)
				pumpkin patch, corn maze, hay rides
				Tastings - food, wine, tea, coffee
				Petting zoo
				fast implementation - pumpkins grow faster than paw paws
				Agritain. unique to city environment
				So much closer than BBB
				Seems very neighborhood friendly
				A new destination in an unknown/less popular neighborhood
				Fun
				Seems to be a great pilot, relatively easy
				Nice to have within the city
				Exciting, engaging, attractive, active
				Neat possibility
				Increases awareness of community in positive way
				great opportunity to bring community together seasonally
Trees	6	20 Concerns	39 Opportunities	
	3	pests & bugs	4	apples, berries, orchards
	3	security	3	always looking for native plants, would like to have an easy place to get and learn about them
	3	timeline - long time to reap fruits	2	Eduction about planting and caring for crops
	3	reality of a nursery, maintaining trees - pruning , harvesting, disease prevention - on-board arborist?	2	pick-your-own
		high up-front costs?	2	hop garden, vineyard, mulberry trees, etc
		seems tricky with insecure land lease length	2	Pittsburgh wine!
		not sure how this differs from greenspace incubator	1	shade, street trees lacking according to ToolBox
		very seasonal	1	lumber growing, processing, carpentry incubator
			1	Christmas tree farm
			1	"Hilltop vineyards"
			1	concord grapes for the more difficult sloped areas
			1	fund orchard through sponsor-a-tree, sponsors get fruit or discounts on processed products
				provides shade, fruits, environmental benefits, economic opportunity
				who hates trees?
				bright, different, engaging, profitable
				orchards suit topography, activates it as an asset
				seed farm for heirloom vegetables
				apple picking, hay rides

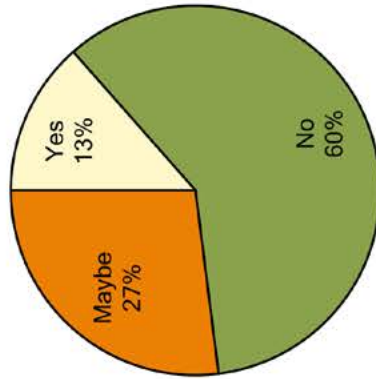
			use of native plants will minimize invasive weeds
Composting	11	18 Concerns	29 Opportunities
	7	loud machinery - sound buffers, practices, rules	5 it is a great idea if we compost
	2	other cities charge - would this be fee-based?	5 potential source of revenue
	1	traffic	4 free pickup of compost from individuals to go to larger compost pile
		collected debris might not be organic - pesticides	3 possible private-public partnership
		if done, should be part of a city-wide initiative for leaf and yard waste	
		compost	1 great way to keep waste out of landfill
		some organizations already doing - Agrecycle, steel city soils, shadyside	
		worms	1 city of Pgh should run, otherwise needs to turn profit (2)
		requires professional/public management and sustainable funding model	Job training/workforce development component
		if City doesn't, then idea seems to fall flat	why not community operated?
		Would it be for City residents only?	good, widely usable, renewable resource
			expand into food composting, PRC could partner
			house rabbit organizations have been looking options for rabbit manure
Other		Concerns	Opportunities
			Partner with a health-care provider to build a healthy living community.
	2	how will the Black community be positively impacted?	Connect new development to South Side bike trails. Include walking trails and exercise equipment throughout new housing. Utilize school building as a health-care facility and place a quality track in the field.
	1	long-term security - what if developer wants to buy it after the farm is already established?	8
		all ideas run counter to statement that parcel will not remain vacant due to proximity to downtown	2 solar panels, windmills for all electric needs
			2 jobs for minorities, residents
			1 sports complex - soccer, football, baseball, track
			new housing
			aquaponics
			tea plantation
			job training with horses
			irrigation, beautiful canals, aqueducts, bridges
			City of Pgh takes on liability
			revenue for the city/community
			sell as private farm/homestead (to me)
			every idea sounds like a great opportunity

APPENDIX 4

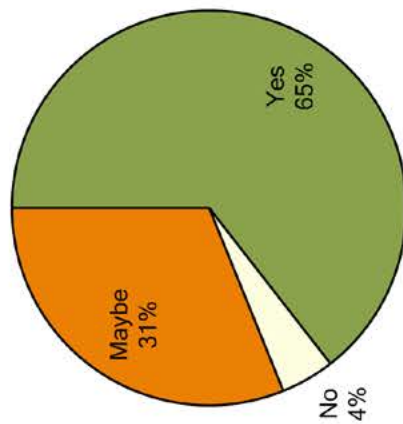
FARMER DEVELOPMENT PROGRAM SURVEY RESULTS

Our Farmer Development Program survey was created in Survey Monkey and disseminated via Grow Pittsburgh, Penn State, and Hilltop Alliance's email lists. Between May 14 and June 26 it received 45 unique responses, thirty of these responses came in the first 24 hours the survey was open. Below and on the next page are some of the summarized results from that survey.

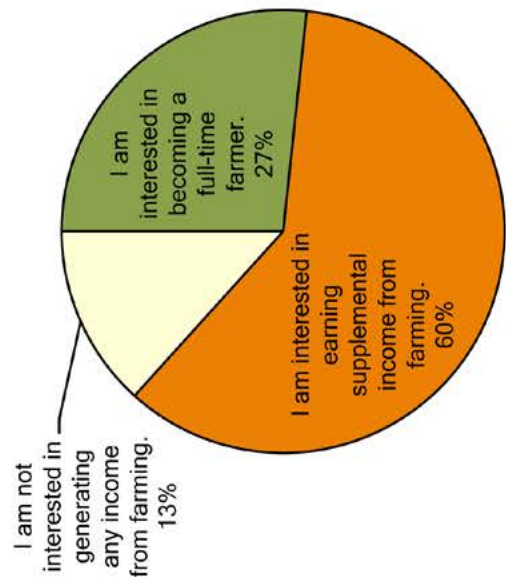
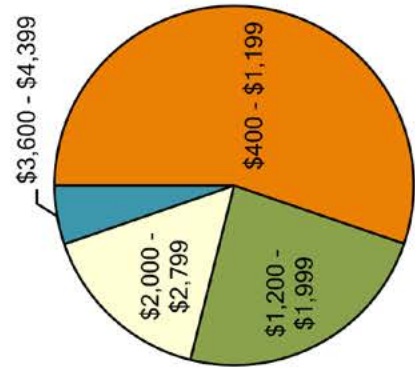
Would the location of such a farmer development program in the St. Clair neighborhood of the South Side of Pittsburgh prevent you from participating?



Is this something that you would be interested in participating in?



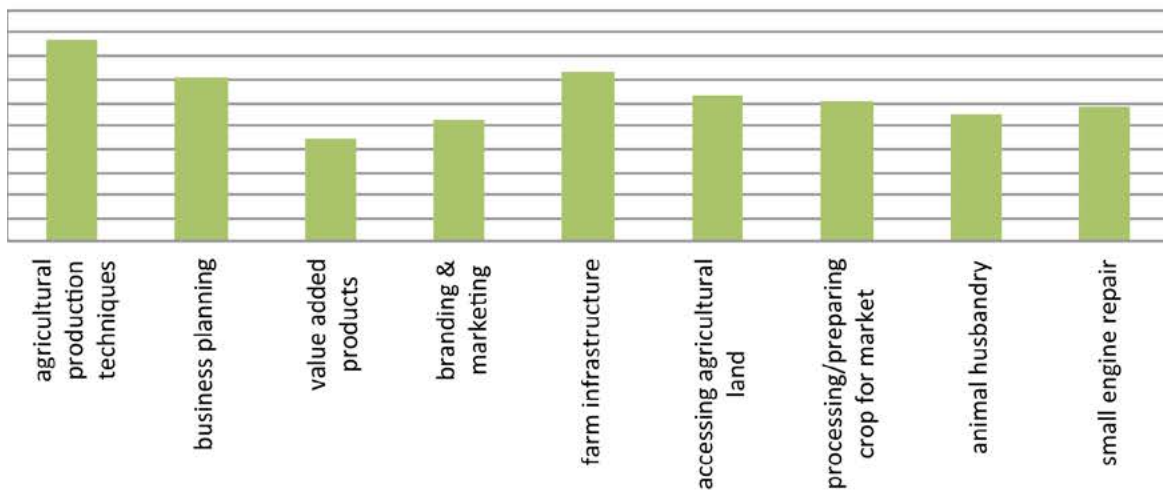
About how much would you be able to contribute financially towards your tuition each year?



If you were to participate in a farmer development program, what would you be interested in producing?

- flowers and vegetables
- grapes, berries, hops
- I'd like to try just about anything
- several varieties of vegetable crops (possibly animal products), possibly as an idea - packaged in csa forms for veterans and their families
- Produce
- Organic Vegetables and Animals (cows, goats, chickens, sheep)
- diversified organic vegetables / focus greens and annual herb
- chickens, salad greens
- Medicinal herbs and edible flowers
- organic produce that can be accessible to broad populace as well as secondary produce items such as jams dried goods etc
- vegetables
- nuts, oils (from nuts), and tree fruits
- rabbits, herbs, veggies, medicinals, garlics
- fermented vegetables, herbs
- bush/cane/tree fruit, berries in particular
- laying hens/eggs, milk goats
- Canned goods(jellies, salsa, tomato sauce)
- Eggs, perennial plant produce (Berries, fruit and nuts, local wild foodstuffs)
- Fruits and veggies
- Mixed vegetables, small fowl
- Not sure -- just about anything, perhaps
- Mushrooms and staple produce (greens, beans, squash, tomatoes, etc) I would also like to raise chickens, but I don't think that would be feasible within the context of this program.
- Tomatoes, Squash, melons, greens, peanuts
- a niche product. organic and heirloom. maybe all purple!
- Mostly root vegetables
- Fruits and vegetables
- Crops for specific value added food products
- Specialty / ethnic vegetables, heirloom tomatoes
- anything! veggies and fruits, herbs, value added, animal products
- berries eggs milk butter jam fermented products goats and goats milk - fruit trees
- cutting flowers, vegetables for restaurants
- Vegetables
- primarily vegetables

Which of the following aspects of a farmer development program would be useful to you?



APPENDIX 5

COMPARISON OF FARMER DEVELOPMENT PROGRAMS

Farm Info	Farm Synopsis	Staff / Structure	Programming	Size and Products
<p>The Farley Center Farm Incubator and Spring Rose Farm Cooperative Springdale, WI Circa 2010</p>	<p>Family owned farm land opened up to immigrants from Latin America to raise culturally appropriate vegetable to sell at a profit. The family donated the land to the non-profit it created.</p>	<p>- Hybrid: Non-profit and Farmers Coop - 8 workers (6PT, 2 Unpaid) - 9 businesses incubated with 24 adults involved</p>	<p>- No rent or fees - No time limit - Organic Cert in 2013 - Formal ed program developing in 2013 - Informal curriculum</p>	<p>- 10 acres total with plots ranging from 1/4 -2 acres - Wholesale produce raised with organic methods and sold to Latin American grocery stores</p>
<p>Headwaters Farm Incubator Program Gresham Oregon Circa 2013</p>	<p>To ensure skilled farmers by removing financial and cultural barriers to land access in response to the aging farmer population; while conserving natural resources and preserving agricultural land.</p>	<p>- Part of East Multnomah Soil and Water - funded by tax dollars - 1 FT staff - Any type of production with a four year business plan is accepted, as long as organic and conservation techniques are employed</p>	<p>- Rent: \$150/acre with a 25% annual increase - Farms start with one acre - 4 year time limit - Informal education via partnerships with Oregon State Extension and NRCS</p>	<p>- 30 acres total with 5 farmers on 6 acres - Max capacity 15 farms - Includes basic fertility, spring tillage, access to wash station, restroom, office space. - Current farms are diversified vegetable operations.</p>
<p>Horn Farm Center for Agricultural Education York County, PA Circa 2010</p>	<p>A community garden that grew into an incubator farm based on the Seed Farm and the Intervale Project, preference to farmers who want to stay in York County.</p>	<p>- Non-profit w/ private funding and small grants - 2 PT staff - Land leased from County at \$1 /year - Sustainable ag practices required</p>	<p>- Rent: \$150 acre + \$75 admin fee - 3-5 year time limit - Informal education via partnerships with Penn State Extension, Seed Farm</p>	<p>- 4 farmers on 8.7 acres, part of 187 acre complex - Plots range from 1/4 -2 acres - Organic practices, diversified vegetable, fruit</p>

Source: The National Incubator Farm Training Initiative's, *The Farm Incubator Toolkit: Growing the NExt Generation of Farmers 2013.*