



Cultivating Community:

An Urban Agriculture Master Plan for Bridgeport

ACKNOWLEDGEMENTS

Green Village Initiative

Cristina Sandolo *Executive Director*

Julian J. Castignoli *Board Member*

City of Bridgeport

Lynn Haig, AICP *Planning Office*

Jacob D. Robison *Planning Office*

Planning Interface

Susmitha Attota *AICP, Principal*

Al Manna Associates

Isa Mujahid *Project Manager*

Bridgeport Food Policy Council

Margot Gotterer

Chelsea Gazillo

Designer

Samantha Bertini

This plan was adopted by the
Bridgeport Food Policy Council
on June 19, 2019.

CONTENTS

1. Introduction	1
2. Needs Assessment	5
3. Vision Statement	17
4. Recommendations	18
5. Appendices	22

1. Introduction

PURPOSE

Agriculture can be a powerful tool for improving quality of life issues in urban areas. In older industrial cities such as Detroit and Cleveland, urban agriculture is used on vacant lots that have been neglected for years. Urban agriculture promotes food access in inner city neighborhoods in Chicago and is creating jobs for those who need them the most in New York City. In the New England region, Boston and Providence are leading the movement by adopting progressive policies, developing programs for vacant and underutilized lots, and offering ongoing technical support to local farmers and gardeners.¹ In Connecticut, food policy councils and non-profits are working with food system advocates, farmers and gardeners to grow and distribute fresh food. This is showcased through school gardens, community gardens, farmer training programs and farmers' markets, especially in low-income communities where access to healthy food is limited.

The city of Bridgeport boasts a grassroots gardening culture, with 20 community gardens, 24 school gardens, and a community farm which assists in addressing the need for produce in the city's neighborhoods. However, many residents still struggle to access fresh, culturally relevant food. The U.S. Department of Agriculture (USDA) uses the term "food desert" to identify low-income urban census tracts in which a significant number of residents live more than a half-mile from a grocery store. Much of Bridgeport has been designated as such, especially tracts in the northern, eastern, and southwestern parts of the city. Compounding the issue, many residents

in these same areas have low vehicle access.² At the same time, community conversations in Bridgeport revealed a demand for locally grown, fresh food. Opportunities to grow food within city limits are limited due to a lack of vacant land designated for agriculture, underdeveloped agriculture land use policy, program funding, and few training programs for new gardeners. Moreover, a lack of land tenure protection makes several garden sites vulnerable to closure.

However, Bridgeport is in a strong position to create policy and practice reform to take full advantage of the existing agriculture framework and expand on its successes. According to a research report published by the University of Missouri Extension, local food systems are proven to strengthen community relationships and help achieve citywide goals of public health, financial sustainability, healthy environments and engaged communities.³ A more robust, comprehensive and integrated urban agricultural network in Bridgeport can strengthen initiatives in these areas.

The purpose of this Urban Agriculture Master Plan is to develop a shared, community-driven vision and actionable policy recommendations for urban agriculture in Bridgeport. The plan analyzes current urban agricultural efforts along with the opportunities and challenges in creating a sustainable food system in Bridgeport. The plan's recommendations delineate responsibilities between different organizations and call for concrete actions to strengthen the viability of urban agriculture undertakings and lowering barriers for residents to become involved for both recreation and entrepreneurship.

1. American Planning Association. (2011). *Urban Agriculture: Growing Healthy, Sustaining Places* (PAS Report 563, p. 3 & p. 82-87). Chicago, IL.
2. US Department of Agriculture. (2017). *Food Access Research Atlas*. <https://www.usda.gov/data-products/food-access-research-atlas/>
3. Hendrickson, M., & Porth, M. (2012). *Urban Agriculture—Best Practices and Possibilities*. University of Missouri Extension, Columbia, MO.



Volunteers remove invasive species from the Little Arctic Community Garden

BACKGROUND

Community gardens, farm stands, farmers markets, food pantries, and healthy corner initiatives provide fresh, locally grown food to the Bridgeport community. Aspiring farmers and value-added food producers (such as makers of jams or baked goods) are creating community initiatives and small businesses that help meet the food needs of the Bridgeport community while building local economic activity. Still, access to fresh food in Bridgeport is limited and there are untapped opportunities to bolster food production and distribution. Understanding the need for a comprehensive approach to improve food access, the City of Bridgeport established a Food Policy Council in 2012 with the purpose of improving the availability of safe and nutritious food at reasonable prices for all residents, particularly those in need. The Bridgeport Food Policy Council began by convening gardeners, farmers market managers, representatives from food pantries, and other partners to develop shared goals and strategies to improve affordable access to fresh food.

In 2016, the Bridgeport Food Policy Council

(BFPC) applied for the Environmental Protection Agency's "Local Foods, Local Places" technical assistance program and was one of only 24 applicants selected to participate in the program in 2017. The goal of the project was to raise awareness of farmers markets among low-income community members, through better branding, programming, marketing and outreach, especially those enrolled in SNAP as Bridgeport Farmers markets double the value of SNAP dollars. A Steering Committee consisting of representatives from the Bridgeport Food Policy Council, Green Village Initiative, A Pinch of Salt, the Council of Churches of Greater Bridgeport and the Bridgeport Office of Planning and Economic Development led the initiative, with technical assistance from the USDA, the U.S. Environmental Protection Agency (EPA), the U.S. Department of Transportation (DOT), the Centers for Disease Control and Prevention (CDC), the U.S. Department of Housing and Urban Development (HUD), the Appalachian Regional Commission (ARC), and the Delta Regional Authority (DRA).

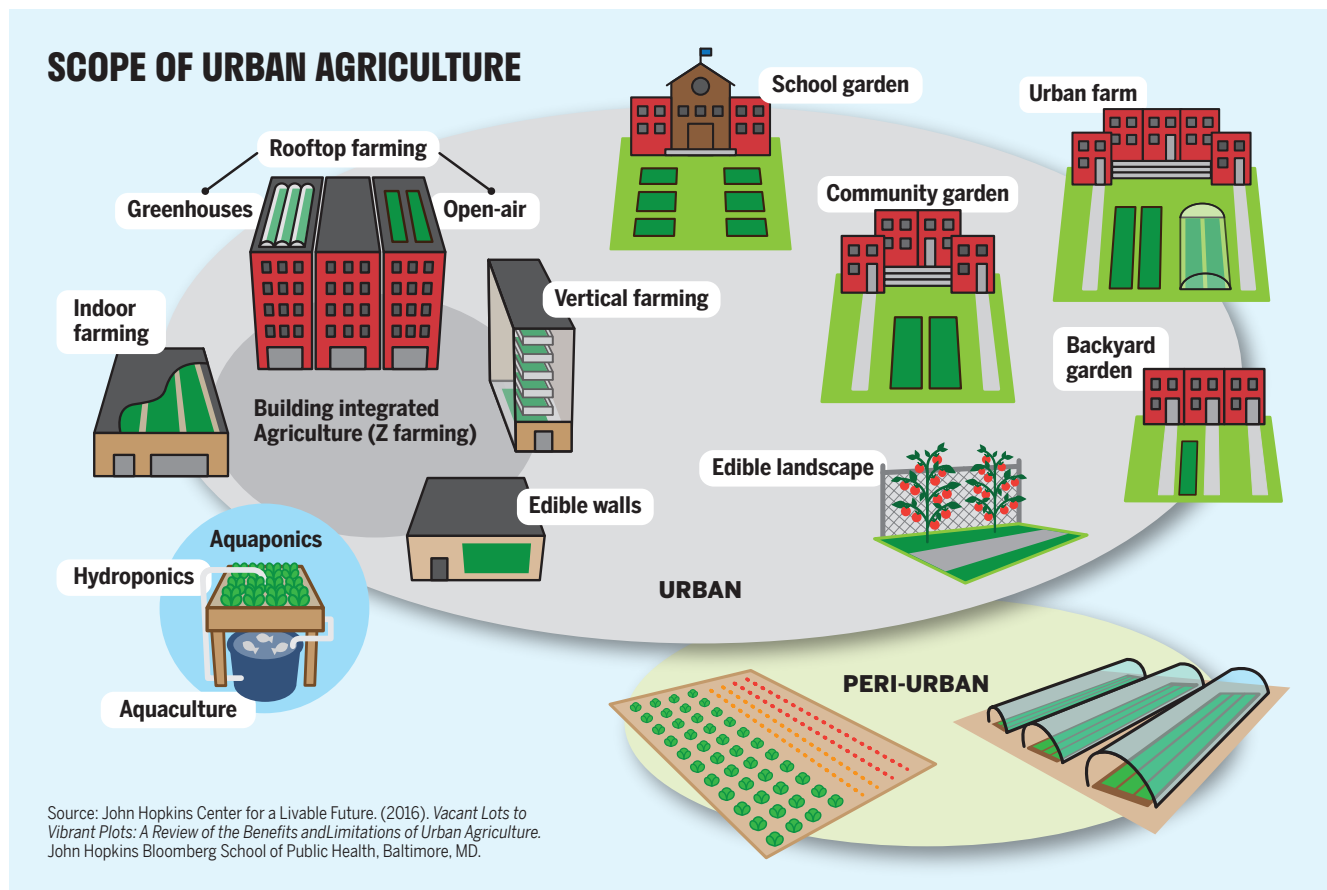
The project's culminating event was a two-day public workshop to derive the community's vision for Bridgeport's farmers markets, goals,

challenges, opportunities, and key action steps to be incorporated into an Action Plan; over 50 individuals representing the Bridgeport community, the City, and organizations participated. The workshop communicated a demand for more Bridgeport-grown produce and Bridgeport-based value-added food businesses. Also expressed, were concerns for the long-term sustainability and expansion of urban farms and gardens. The resulting Action Plan included an action step to develop and adopt an Urban Agriculture Master Plan, within a goal to “Lower the barriers to entry in Bridgeport for people who want to grow food or food businesses.”

An Urban Agriculture Master Plan Steering Committee was formed and immediately advised the Bridgeport Food Policy Council on development of a definition of urban agriculture for Bridgeport: “farms and gardens that exist within city limits for the purposes of household consumption, commercial venture, or education, such as urban farms, community gardens, backyard gardens, and school gardens. Urban agriculture can include activities such as hydroponics, aquaponics, aquaculture, indoor farming, rooftop farming,

beekeeping, flowers, livestock (i.e. chickens, grazing goats), composting, and use of accessory structures, such as hoop houses, greenhouses, cold frames, and sheds.” In January 2018, the Urban Agriculture Master Plan Steering Committee distributed a Request for Proposals seeking a consultant to lead the development of an Urban Agriculture Master Plan. The application and vetting process focused heavily on securing wide-ranging community input throughout the project and inclusivity of all food-related activities including those with progressive economic benefits for the community, such as community land ownership.

Implementation of this Master Plan will lead to an economically vibrant, community-led, local food system. Key themes throughout include: enabling long-term sustainability of gardens and farms, eliminating barriers to entry within gardening and farming, increasing small business development and community land ownership, and developing guidelines for gardeners and farmers that bolster productivity, beautification, and overall community benefit.



Source: John Hopkins Center for a Livable Future. (2016). *Vacant Lots to Vibrant Plots: A Review of the Benefits and Limitations of Urban Agriculture*. John Hopkins Bloomberg School of Public Health, Baltimore, MD.

PLANNING PROCESS

Green Village Initiative (GVI), with the City of Bridgeport and the BFPC, initiated the development of the Urban Agriculture Master Plan and facilitated the planning process. In the spring of 2018, GVI hired Planning Interface and Al Manna consultants to facilitate community conversations, draft the Master Plan based on community input and provide recommendations.

The advisory committee that oversaw the planning process included representatives from: Green Village Initiative, the City of Bridgeport, Chestnut Hollow Farms, Connecticut Small Business Development Center, Groundwork Bridgeport, Bridgeport Food Policy Council, I Luv Bpt, CTCORE- Organize Now!, and Greater Bridgeport Community Enterprises. The committee met monthly (seven meetings total) to discuss approach, community feedback, technical findings and recommendations.

Over 600 local, regional, and statewide stakeholders were engaged in the planning process. The forums for gathering stakeholder input included:

1. Two stakeholder meetings conducted in the last week of June 2018 (35 attendees).
2. Three public workshops: two in in July 2018 and one in February 2019 (60 attendees total).
3. Presentations at the Neighborhood Revitalization Zone (NRZ) meetings in the following communities: the Hollow, Reservoir, West End, South End, Black Rock, East Side.
4. An online survey from August 6, 2018–October 31, 2018, which was available in English & Spanish (450 responses total). Surveys were distributed at various community sites, such as the library, churches, grocery stores, and through community partners, such as Park City Communities. Postcards with a QR code & web address for the survey were distributed at farmers markets across the city. In addition to surveys, community feedback forms were distributed at meetings (4 were submitted).



Flyer to inform individuals about the project. The QR code linked to the survey webpage.



Isa Mujahid leads a discussion at an Urban Agriculture Master Plan community workshop.



Participants of an Urban Agriculture Master Plan community workshop discuss potential garden sites in Bridgeport.

2. Needs Assessment

SOCIO-ECONOMIC AND HEALTH INDICATORS

Bridgeport's demographics, geography, economy, and health habits present both strengths and weaknesses to developing its urban agriculture network. During Plan outreach, residents demonstrated that they understand the quality of life issues that agriculture can help alleviate if barriers are removed.

Geography, Population, and Housing

Bridgeport is the most populous municipality in Connecticut, with a population of 146,576 people in 2017. Bridgeport's population density is 9,029 people per square mile, making it 30% denser than Hartford and New Haven.⁴ While Bridgeport's density makes the city accessible to non-motorized transport, it also reduces the abundance of open space and heightens its value. As abundant, inexpensive open space is the groundwork for the most accessible forms of agriculture, Bridgeport's density is stifling to expansion of urban agriculture. Bridgeport has a high renter-occupancy rate at 58%, almost double that of the state.⁴ During Plan outreach, many renters mentioned that they could not garden on the property they rent for a variety of reasons, including prohibition by the landlord, lack of space, and hesitation to garden in common areas.

Bridgeport's existing network of community gardens utilizes vacant lots owned by the City to provide free garden beds to residents without

open space access. Green Village Initiative, the operator of most of the gardens, reports that there are frequently wait lists for garden beds; in 2018 10 people were on a waitlist for garden beds at Reservoir Community Garden. This indicates that as new community gardening opportunities come available, they will quickly be filled with new gardeners.

Education, Income, and Employment

As of 2017, 20.8% of Bridgeport's population lives under the federal poverty level, compared to a statewide rate of 9.6%.⁴ The unemployment rate in Bridgeport is 4.6%, substantially higher than the unemployment rate for the state (3.2%*.⁵) Along with higher unemployment, Bridgeport has a relatively low median family income of \$44,841, compared to the state median of \$73,781.⁴

During a stakeholder meeting, a Councilwoman described an entrepreneurial family in her neighborhood that grows vegetables and herbs to produce and share a popular cooking base called sofrito. Like this family, many gardeners who attended plan outreach are interested in selling their produce or value-added goods but did not know how. If a structure is established to distribute these goods, it is likely that demand for Bridgeport-made products at farmers markets will foster successful businesses. Opportunities for self-employment or supplemental income like this can be a significant factor in raising the level of economic stability for residents.

Knowledge of gardening is often a barrier to accessing these entrepreneurship opportunities. Even though most of Bridgeport's primary schools

4. US Census Bureau. (2019). QuickFacts. Retrieved (2/28/2019) from <https://www.census.gov/quickfacts/fact/table/newhavencityconnecticut,hartfordcityconnecticut,bridgeportcityconnecticut,ct/PST045218>

5. CT Department of Labor. (2019). Current Labor Force Data for Connecticut Towns (LAUS). Retrieved (2/28/2019) from <https://www1.ctdol.state.ct.us/lmi/laus/lmi123.asp>

The Youth Farm Crew washes the harvest for the farm stand at Reservoir Community Farm.



have gardens, Bridgeport Public Schools has not yet incorporated gardening into its overarching curriculum. Given that only 18.1% of the population at least 25 years old possess a university degree, most Bridgeport residents are not qualified for higher paying jobs, and often must work multiple jobs to support their family⁴. Community members requested that non-profit organizations work with the Board of Education (BOE) to implement gardening education programs into the curriculum, so that at a young age, students can gain basic gardening knowledge that they can carry with them into adulthood. GVI has previously worked with Sacred Heart University to produce gardening lesson plans for grades K–6, which are currently available to teachers. The BOE may also consider implementing adult education gardening classes.

Health and Food Consumption

Bridgeport has a high obesity rate of 36%, compared to the statewide obesity rate of 26%.⁶

This can be attributed to many factors, the most notable being the lack of exercise and nutrition. Studies have concluded that individuals who gain access to fresh, local foods are generally willing to adopt healthier eating habits. A study of Bridgeport high school students described the produce of unknown origin in their school lunches as old, artificial, and low quality. These same students expressed a preference for locally grown produce, noting that it looks and tastes better. Quite significantly, this was often the deciding factor on whether produce would be consumed by an individual⁷. Another study found that urban youth who are involved in gardening programs are more willing to eat nutritious foods than those who are not involved in such programs⁸.

A survey conducted by the Bridgeport Department of Health and Social Services found that half of city residents are food insecure, meaning they do not always have access to enough food to meet their basic needs due to lack of

6. DataHaven. (2016). *Fairfield County Community Wellbeing Index 2016* (p.30). Retrieved 2/28/2019 from http://www.ctdatahaven.org/sites/ctdatahaven/files/DataHaven_FairfieldCounty_Wellbeing.pdf

7. Greer AE, Davis S, Sandolo C, Gaudet N, Castrogiovanni B. Formative research to create a farm-to-school program for high school students in a lower income, diverse, urban community. *J Sch Health*. 2018; 88: 453-461.

8. Beckman, Lauren & Smith, Chery. (2007). Beliefs, knowledge, and values held by inner-city youth about gardening, nutrition, and cooking. *Agriculture and Human Values*. 24. 245-258. 10.1007/s10460-006-9051-z.

financial resources. In some neighborhoods such as the East Side, Downtown and the West Side, up to two-thirds of residents experienced food insecurity⁹. In several outreach meetings, residents explained that gardening is not practiced solely as a hobby, but as a means of subsistence. For some gardeners, the produce they grew was their only way of securing fruits and vegetables, and for some, it was one of their few sources of food.

LOCAL AND REGIONAL FOOD SYSTEM ANALYSIS

Agricultural Trends in the Region

There is a lack of adequate access to local food throughout New England. With less than 2 million acres of active farmland, only 12% of food consumed in New England is locally produced. In response to this lack of access, Food Solutions New England has launched a New England Food Vision: that 50% of the food consumed in New England will be produced in New England by 2060.¹⁰ As the fifth most populous city in New England, Bridgeport’s consumer population can be a major factor in making this vision a reality; increasing demand for regionally grown food among the Bridgeport population is crucial to sustaining the regional food system.

According to the Locavore Index, consumer preferences for locally grown food in Connecticut meet or exceed national averages. Connecticut was ranked the 10th most “locavore-oriented” (preference for locally grown food) state in the nation in 2015, based on per-capita sales by farmers directly to consumers, the number of farmers markets, Community Supported Agriculture programs, food hubs, and the percentage of school districts with farm to school programs¹¹. Connecticut’s state website states that “while agriculture no longer holds its once-

prominent position in Connecticut’s economy, farming is still important to the state.” The total impact of agriculture on Connecticut’s economy in 2015 was between \$3.3 and \$4.0 billion. The number of jobs generated by agriculture in Connecticut is between 20,007 and 21,696, contributing approximately \$800–\$900 million in wages. Agriculture in the state is quite diverse. In 2015, the majority of agricultural sales were in industries such as nurseries, greenhouses, sod production, and vegetable and fruit farming. The aquaculture industry has nearly doubled its sales since 2015¹².

According to the US Agricultural Census, the number of farms in Connecticut is increasing (by 43% from 2002 to 2012), but average farm sizes are decreasing and our farmers are aging (see Table 1 below).¹³ At the same time, Connecticut’s urban population has increased from approximately 2.9 million in 1980 to 3.4 million at present, and accounts for about 95% of the total population. Furthermore, the percentage of food insecure households in Connecticut increased slightly, from 11.9% (2009–2011 average) to 12.2% (2015–2017 average¹³).

TABLE 1

	2002	2012
Numbers of Farms	4,191	5,977
Acreage of Farmland	357,154	436,539
Average Farm Size	85 Acres	73 Acres
Average Age of Principal Farmers	55.4 Years	58.7 Years

These trends indicate not only the dire need to train a younger generation of farmers, but that innovation and diversity are key to the growth of the agricultural industry in Connecticut so that food production in our state can continue. In fact, researchers at UCONN concluded that agriculture

9. Bridgeport Food Policy Council. (2015). *Food Action Plan* (p.13).

10. Donahue, B., Burke, J., Anderson, M., Beal, A., Kelly, T., Lapping, M., Ramer, H., Libby, R., & Berlin, L. (2014). *A New England Food Vision* (p.8). Food Solutions New England, University of New Hampshire.

11. 2015 Locavore Index. Retrieved (5/11/19) from <http://www.strollingoftheheifers.com/locavore-index-2015>

12. Connecticut’s Official State Website. Retrieved (5/11/19) from <https://portal.ct.gov/About/Economy>

13. US Agricultural Census. Retrieved (1/14/2019) from <https://www.census.gov/econ/www/agrimenu.html>

in Connecticut “will take the non-traditional path compared to other states” and that with the right mix of public and private policies, there will be a growth in the agricultural industry that is “efficient, economically viable, and consumer-oriented.”¹⁴

Boosting urban agriculture in Connecticut’s cities can compliment growth in the agricultural industry statewide, especially when connections are made between rural or peri-urban (those adjacent to a city) farms and our urban populations (such as through farm incubator programs, farmer training sites, and food distribution pathways into cities). Urban agriculture is an opportunity to position Bridgeport as a key asset within the Connecticut food system, increasing food quality and availability, and creating economic opportunities for entrepreneurs and micro enterprises. Additionally, there is potential for Bridgeport to become a destination with a vibrant food culture. As demonstrated by the emergence of a vibrant food scene in Providence, Rhode Island, this can be catalyzed by encouraging food businesses to purchase products from local and regional farms.¹⁵

Local Food System Profile

Bridgeport, the Park City, is emerging as a center of local food in Connecticut. It is well positioned to become a culinary destination, with a variety of restaurants, vibrant farmers markets, craft breweries and distilleries, food trucks, farms and gardens, and shared-use commercial kitchens. Bridgeport is home to:

- One for-profit high density hydroponic urban farm business (MetroCrops).
- One outdoor educational farm (Reservoir Community Farm) managed by Green Village Initiative (GVI), a non-profit dedicated to food justice, urban agriculture, and leadership development.
- 17 community garden sites managed by GVI, Bridgeport Community Land Trust, or other community groups.
- 25 school garden sites which provide healthy food and educational opportunities to students.



A young farmer shows off radishes grown at Reservoir Community Farm.

An average American city will be able to produce the entire recommended vegetable intake of its population just by dedicating 10% of its city limit area to urban farming.¹⁶

14. Lopez, R.A., Boehm, R., Pineda, M., Gunther, P., and Carstensen, F. (September 2017). *Economic Impacts of Connecticut’s Agricultural Industry: Update 2015*. Zwick Center for Food and Resource Policy Outreach Report No. 47. University of Connecticut.

15. Carmody Consulting et al. (2015). *Bridgeport Food Commerce Feasibility Study* (p.13). Bridgeport, CT.

16. John Hopkins Center for a Livable Future. (2016). *Vacant Lots to Vibrant Plots: A Review of the Benefits and Limitations of Urban Agriculture*. John Hopkins Bloomberg School of Public Health, Baltimore, MD.



Bridgeport's Farmers Markets are abundant with locally grown produce.

6 Farmers Markets & Farm Stands

- Downtown
- Reservoir
- East Side
- Black Rock
- South End
- St. Vincent's

All double SNAP (food stamp) benefits. These sites create opportunities for entrepreneurs— acting as incubators to food businesses.

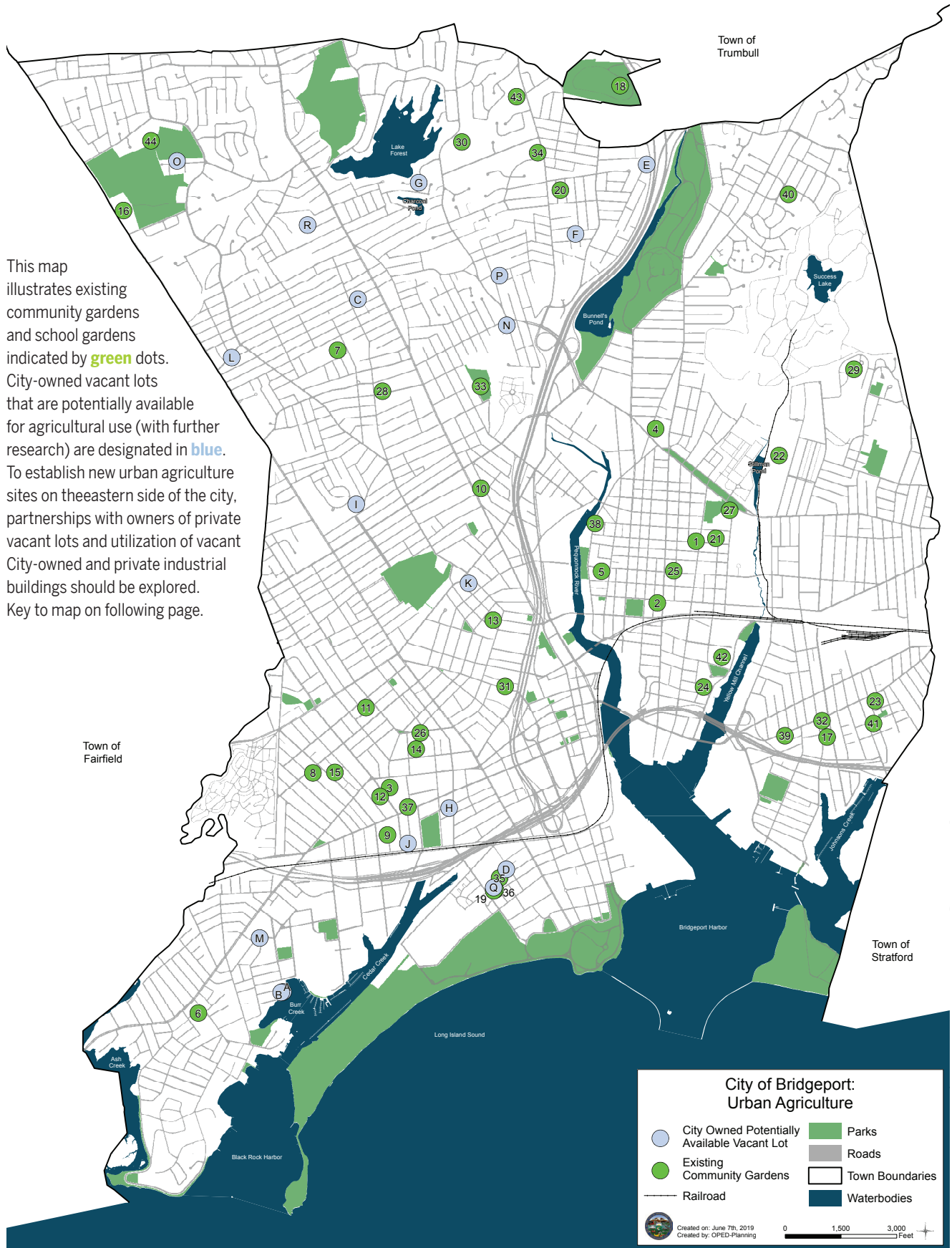
32 Food Pantries & Soup Kitchens

operated by the Council of Churches of Greater Bridgeport.

Existing farms include Reservoir Community Farm and Metro Crops.

- An intensive Urban Farmer Training Program that educates aspiring urban farmers on the foundational skills in farming for market. The program is run by the UConn Agricultural Extension in partnership with GVI and the Greater Bridgeport Opportunities Industrialization Center. The program is a 12-month course; an average of 16 individuals enroll annually.
- A network of six to seven independent neighborhood farmers markets and farm stands in operation annually, featuring more than a dozen emerging food business and farmer vendors, and which generates \$150,000 in revenue per year. These farmers markets and farm stands are supported by the Bridgeport Farmers Market Collaborative.
- Youth culinary training provided by Cook and Grow and A Pinch of Salt.
- Culinary entrepreneur training and food business development support offered by the Council of Churches of Greater Bridgeport, Greater Bridgeport Opportunities Industrialization Center and A Pinch of Salt. Approximately 70 aspiring culinary professionals participate annually.
- The Bridgeport Regional Aquaculture Science and Technology Education Center, a high school which serves grades 9 through 11 and features Angie's Aqua Seafood Market, a public seafood market operated by students.
- Bridgeport high school students can also attend the Trumbull Agriscience & Biotechnology Center, which offers studies in animal sciences, plant sciences and environmental biotechnology.
- The East End Pop-up Market and Café, a community grocery store.
- Commercial kitchen space at 800 Union Avenue and the Bridgeport Trade and Technology Center.
- Shared-use kitchens managed by the Council of Churches of Greater Bridgeport.
- Large scale value-added producers and distributors such as Chaves Bakery, De Yulio's Sausage, Frisbie's pies, H & H Shellfish, and budding businesses in the Bridgeport Trade and Technology Center.
- A wide variety of restaurants offering international cuisine.
- Breweries and distilleries including Brewport, Aspetuck Brew Lab, and Asylum Distillery.

CITY OF BRIDGEPORT: COMMUNITY GARDENS MAP



This map illustrates existing community gardens and school gardens indicated by **green** dots. City-owned vacant lots that are potentially available for agricultural use (with further research) are designated in **blue**. To establish new urban agriculture sites on the eastern side of the city, partnerships with owners of private vacant lots and utilization of vacant City-owned and private industrial buildings should be explored. Key to map on following page.

City of Bridgeport: Urban Agriculture

	City Owned Potentially Available Vacant Lot		Parks
	Existing Community Gardens		Roads
	Railroad		Town Boundaries
			Waterbodies

Created on: June 7th, 2019
Created by: OPED-Planning

0 1,500 3,000 Feet

MAP KEY: CITY OF BRIDGEPORT COMMUNITY GARDENS

Potentially Available Vacant Lots		Existing Community and School Gardens			
Key	Location	Key	Location	Key	Location
A	31 Arthur Street	1	Alice's Community Garden	23	87 Hewitt Street
B	41 Arthur Street	2	Barnum Avenue Community Garden	24	Hough Avenue Community Garden
C	111 Burnsford Avenue	3	Bassick High School	25	Little Arctic Community Garden
D	131-137 Columbia Street	4	Beardsley Elementary	26	Little Asia Community Garden
E	370 Dayton Road	5	Big Arctic Community Garden	27	Luis Munoz Marin School
F	115 Dodd Avenue	6	Black Rock Elementary School	28	Madison School
G	237 Griffin Avenue	7	Blackham School	29	Multi-Cultural Magnet School
H	251-253 Hanover Street	8	Bryant School	30	Park City Magnet School
I	165 High Ridge Drive	9	Cesar Batalla Elementary	31	Pequonnock Street Community Garden
J	33-35 Lee Avenue	10	Charles Street Community Garden	32	Ralphola Taylor Center
K	6-8 Madison Street	11	Classical Studies Academy	33	Read School
L	875 Merritt Street	12	331 Clinton Avenue	34	Reservoir Community Farm and Garden
M	244 Monroe Street	13	Columbus Elementary	35	Ridge Avenue Community Garden
N	225 Pond Street	14	Curiale School	36	126 Ridge Avenue
O	138 Ranch Drive	15	Denver Avenue Community Garden	37	1134 State Street
P	473 Saunders Avenue	16	Discovery Magnet School	38	28 Stillman Street
Q	189 Walnut Street	17	Dunbar School	39	1060 Stratford Avenue
R	158 Woodmont Avenue	18	Fairchild Wheeler School	40	Thomas Hooker School
		19	582 Gregory Street	41	Tisdale School
		20	Hallen School	42	Waltersville School
		21	Hallet Street Community Garden	43	Wilbur Cross School
		22	Harding High School	44	Winthrop School

Current State of Bridgeport's Food System

The foundation of local food production and retail in Bridgeport is growing. Local food production consists of indoor vegetable production, small-scale gardens and farms and value-added producers. Local food retail occurs at farmers markets and farm stands, and is expanding with the East End market, a community-run grocer which opened in the East End in early 2019. The increasing demand for locally-grown food, the ability of farmers markets and shared-use kitchens to incubate small businesses, and the growth of culinary and farmer training programs are collectively allowing food entrepreneurs to launch businesses, learn from peers and benefit

from real-time customer feedback. Additionally, community-minded businesses and organizations such as Green Village Initiative, A Pinch of Salt, the Bridgeport Farmers Market Collaborative, and Bridgeport OIC (Opportunities Industrialization Center) are facilitating connections between emerging farmers and value-added businesses. For example, Dave's Angry Sauce introduced a hot sauce made with Bridgeport-grown hot peppers in Fall of 2018 after successfully completing A Pinch of Salt's food entrepreneurship course. The new East End Market and Cafe will feature Bridgeport-grown produce and locally made food products. This increase in local food production, procurement and distribution is fostering growth of Bridgeport's food economy.

Still, a lack of coordination between growers, value-added producers, support organizations and the City stunts further growth of Bridgeport's food system. For example, while GVI has adopted standardized elements for community gardens (with raised beds and adequate walkways), there has been no standardization of garden design or management methods across organizations. Additionally, unreliable land tenure prevents growers and site managers from investing in farms and gardens for long-term growth. These factors can contribute to the decline of sites that are not optimally or consistently maintained. There is also a significant lack of clarity among individuals seeking to grow, produce, or sell food, regarding points of entry and responsible parties. For example, food vendor permitting processes are unclear and the City's zoning code does not consider small-scale agriculture and presents barriers to diverse farming activities (e.g. produce, livestock, honey). Moreover, limited funding and resources prevents organizations that manage sites and offer training from achieving in depth, consistent development and communication of site designs templates, training curricula, technical assistance and toolkits.

Community Feedback

These barriers to a coordinated, community food system were corroborated by community feedback. In addition to in-person meetings and workshops, online public surveys were made available from July 2018 to October 2018 in both English and Spanish. A postcard with instructions on how to take the survey from mobile phones was also disseminated at community events and through partners, including farmers markets and Park City Communities. Nearly 420 survey responses were collected from varying age groups and ethnicities, with the majority of respondents being female (67%), renters (54%), and having lived in Bridgeport for ten years or more (54%).

The top three barriers to enhancing urban agriculture were identified as:

- Lack of awareness on how to get involved in existing gardens (64%)
- Lack of skills and training on gardening/farming (57%)
- Lack of citywide policy and guidance for gardeners (47%)

This word cloud communicates survey respondents' perceived challenges and threats to enhanced urban agriculture in Bridgeport. The size of the phrase reflects the number of times it was communicated by participants, with the largest phrases mentioned the most.





The Farm Crew at Reservoir Community Farm sets up their stand for customers.

Other concerns included the lack of policies for gardening, lack of finance and governmental support, challenges with cleanliness at existing gardens, and the quality, price, and availability of produce. Astonishingly, nearly 25% of respondents stated that they are unable to access healthy food. Many are seeking alternate spaces for growing food, such as gaining access to another person's yard (35%), containers (52%), their work sites (23%), and roof tops (23.5%). There was much interest in facilitating more food production, value-added processing, distribution, and composting. When discussing challenges to farmers markets and value-added producers, simplifying permitting processes was mentioned.

Many respondents expressed that they would like to see a comprehensive program that supports gardening and farming in Bridgeport, more coordination across organizations, and more communication about urban agriculture. The need for garden locations and enrollment processes to be clarified and communicated widely was mentioned often, as were interests in more skill sharing, training and small business development opportunities; participants noted that this could lead to program improvements and scaling, including through partnerships with universities.

When asked to define aspects of urban agriculture, 90% of respondents stated community gardens. 43% of respondents donate garden

produce to food pantries, soup kitchens, and other organizations. When asked which garden or farm has had a positive impact in their community, nearly all respondents mentioned Reservoir Farm, school gardens, the Michelle Obama community garden or other community gardens. 70% of respondents would like to see existing gardens protected on city-owned lots and 77% would like to see locally grown food made more available. Additional topics arising during community conversations included designating agricultural sites on the City's Land Use Map and creating a Community Land Trust to protect agricultural sites over the long-term while keeping decision-making and value generation in the hands of the public. Residents also mentioned an interest in utilizing vacant, City-owned industrial buildings for urban agriculture.

Promoting economic development and healthy eating was emphasized as key factors in a vision of a Bridgeport food system. The key elements voiced were: sustainable, economically vibrant, multicultural, and entrepreneurial-driven, and community-led. It became clear that a primary entity is known to the community as being accountable for the development and sustainability of our local food system, and that a well-coordinated network that builds on the work of growers, partners, and support systems could catalyze a community food system in Bridgeport.

ANALYSIS OF REGULATORY FRAMEWORK

Zoning

According to the City’s Zoning Regulations, effective August 15, 2018, agriculture/farming is explained as “The science or art of cultivating the soil, producing crops in varying degrees; the preparation of these products for man’s use and their disposal (as by marketing.)” It continues to say that “such uses may take place indoors or outdoors in greenhouses or similar building/structures.” A list of uses includes truck farms, gardens, truck gardens, urban gardens, farms, and hydroponic gardens.

Agriculture/Farming uses are a principal permitted use in Heavy and Light Industrial Zones and in the Mixed Use- Light Industrial Zone. Zones which allow the use as a special permit use are Office-Retail, Office-Retail General, Office-Retail Regional, Mixed Use Education/Medical, Mixed Use Waterfront, and Zoological Park Zone. It is not allowed in the Planned Development District zone or any residential zones.

Zoning’s definition of agriculture is limited in scope as it only defines extensive production of crops in industrial or semi-industrial zones. While examples of this type of use do exist in Bridgeport, a prime example being MetroCrops which produces large quantities of crops in a light industrial zone, this definition leaves out small-scale or less-extensive crop production along with animal husbandry. Most notably, many of Bridgeport’s community gardens exist outside of this definition, mostly in residential zones.

Code of Ordinances

Keeping Livestock

The City’s Code of Ordinances disallow the keeping of any swine within 100 feet of any house, schoolhouse, church, street, or park. The ordinances go on to disallow keeping of any swine, game birds, or fowl without written permit from the board of health. (6.04.010—*Keeping of certain animals prohibited.*) During Plan outreach, residents asked for the ability to keep small-scale livestock on an as-of-right basis, explaining their opinion that keeping livestock for personal use shouldn’t

require City oversight. This ordinance could also include discussion of more animals relevant to farming, such as bees, horses, and aquaculture.

Selling Live Poultry

The Code of Ordinances 6.04.020—*Buying and selling live poultry*, Section A specifies that a health officer must inspect the premises of which market poultry is kept, and the officer must issue a license based on this inspection. Section B specifies some conditions which must be met for a poultry processing site, but then seems to negate all regulations in the code in its last sentence: “Nothing in this section shall prohibit farmers from selling live poultry raised on their own premises or require a license therefore.” This section should be examined to determine if rewording is necessary for further clarification.



Volunteers learn how to harvest garlic with farmers at Reservoir Community Farm

STRENGTHS, WEAKNESSES, OPPORTUNITIES, AND THREATS (SWOT) ANALYSIS OF CURRENT BRIDGEPORT FOOD SYSTEM

The following SWOT analysis is a result of extensive community conversations at NRZ meetings, public workshops, stakeholder meetings, and through feedback received via online public survey.

Strengths

- High interest and passion for urban agriculture, with hundreds of community members growing food at home and in community gardens, and a diverse population interested in growing culturally appropriate food.
- Basic infrastructure for gardening and farming: over 17 community gardens and 25 school gardens, most using standardized raised beds.
- School-garden lesson plans that tie to Bridgeport curriculum are available to teachers.
- Bridgeport's educational, outdoor urban farm grows 5,000 pounds of healthy produce for the community and engages over 2,000 people in urban farming each year.
- Increasing demand for Bridgeport-grown food and Bridgeport-based businesses at Bridgeport Farmers Markets. Farmers markets generated \$150,000 in sales in 2017. Coordinated effort across six farmers markets to double food stamps.
- An Urban Farmer Training Program providing intensive training in growing produce for market.
- More than 40 food pantries, some sourcing CT-grown produce.
- Partnerships between Fairfield University, Sacred Heart University and community organizations, evaluating and strengthening the local food system.
- A restaurant base that can promote farm to table connections.

Weaknesses

- Lack of adequate backyard space to grow fresh food in some neighborhoods.
- Without season-extension infrastructure, fresh food production is limited to 6 months.
- Lack of land tenure protection for agricultural sites.
- Lack of awareness of means of entry to gardens.
- Lack of regulatory framework for enhancing urban agricultural operations.
- Lack of formal relationships among community gardeners, the City, and partner organizations; disjointed, duplicate, and redundant efforts at times.
- Limited resources such as skilled labor, capital, and convenient water access, causing some gardens to be poorly maintained.
- Limited fresh food suppliers in the city.
- Inadequate marketing efforts of local food producers to community.
- Organic Certification requirements are lengthy and expensive.
- Challenging permitting process for food business start-ups.
- Absence of large-scale food waste composting system.

Opportunities

- Changing perception and identity of Bridgeport to a culinary destination, while reinforcing deep cultural values.
- Creating economic development through farming, pop-up farm stands, and value-added food businesses while increasing access to fresh, quality food.
- New business and job opportunities in growing, processing, and distributing food products by linking growers to emerging restaurants, food trucks, and food products.
- Rise in innovation economy through vertical and indoor farming.
- Public health improvement, particularly decreasing diet-related diseases
- Increasing Bridgeport's climate resilience.
- Re-integration of ex-offenders into workforce or community revitalization efforts.
- More community green space and re-activation of vacant and under-utilized lots and buildings.
- Building social capital and a vibrant city. Intergenerational and multicultural learning and relationship development.

Threats

- Development pressure on garden and farm lots.
- Lack of adequate financing for operation and maintenance.
- Emergence of "low cost" conventional organic products.
- Perception that locally grown food is expensive.
- Instability in real estate costs.
- High population turnover limiting continuity in maintenance of gardens.
- High staff turnover in existing school system limiting continuity of use of school gardens.
- School faculty do not have time or resources to maintain gardens year-round; intense growth of weeds prohibits entry by teachers.
- Contaminated soils require raised bed infrastructure.
- Lack of knowledge of regulatory framework on urban agriculture.
- Liability associated with gardening and farming on public lands.

3. Vision Statement

Members of the Bridgeport community participated in shaping the vision of this plan both formally, through meetings and public workshops, and informally, through surveys. Promoting economic development, small business development, and community land ownership were themes emphasized throughout our conversations.

Based on these discussions, the following vision statement was crafted:



The Bridgeport community envisions the city having...

...a **culturally representative** food system reflective of the deep cultural values of Bridgeport;

...a **nourishing** food system that promotes the well-being of residents and improves the health of the general public;

...a **just** food system in which participation in all aspects is equally accessible to all;

...a **sustainable** food system that is environmentally responsible and integrates local and regional agricultural operations;

...a **resilient** food system that is capable of providing long term food security, adapts well to climate change, and reduces dependence on outside food sources;

...a **community-led** food system that maintains the character and diversity of neighborhoods, protects the interests of residents, and enhances their quality of life;

...a **well-coordinated** local food system that bridges existing gaps and fosters new partnerships for promoting effective farm to table connections;

...an **economically vibrant** food system that benefits and incubates entrepreneurs and businesses.

4. Recommendations

Based on issue analysis and research of best practices across the nation, a well-coordinated Bridgeport agriculture network can be made possible through establishing a unified strategy for residents, organizations, and the City. The following policies and actions are therefore recommended to transform residents' food system vision into a reality:

A. ESTABLISH FORMAL STRUCTURE

1. Designate the Food Policy Council to Oversee Urban Agriculture Master Plan Implementation and Policy

During Plan outreach, the community requested that one agency be held accountable for implementing this Plan. As such, the Food Policy Council should be the agency identified to oversee implementation of this plan and work with other agencies to develop policies. The Food Policy Council must have the support of local gardeners, agriculture organizations, and the City. The Food Policy Council will be tasked with performance monitoring, grant support, and ensuring collaboration among agriculture organizations and food-based initiatives.

2. Designate an Implementation Committee

In cooperation with the Food Policy Council and City of Bridgeport, an independent implementation committee should be designated with participants from various organizations to develop urban agriculture programs and partner with organizations to change their operating procedures to be friendlier to growers. This

committee shall have representation from a diverse set of organizations, cultures, and classes and be open for community member involvement.

B. STRENGTHEN EXISTING AND POTENTIAL GARDEN SITES

1. Develop a Community Land Trust

Protecting land tenure of agriculture sites is an ongoing challenge for nonprofits. To strengthen their tenure, the implementation committee should develop an independent community land trust. Community Land Trusts:

“Maintain long-term stewardship over the land by issuing 99-year leases with affordability requirements to...farmers. Deed restrictions and other long-term affordability mechanisms can also be used by Community Land Trusts for additional flexibility. Because the land is... under a long-term lease the land cannot be “flipped” by speculators who buy undervalued land with the intention of selling it for profit...The Community Land Trust keeps the value generated by public and collective investments in the hands of the community (Cho, Li, Salzman, 2016, pg. 5).”¹⁷

Alternatively, a non-profit land trust that acquires land titles or obtains conservation easements to preserve land as agricultural sites could be established. Local examples of this type of land trust include New Haven Land Trust and Aspetuck Land Trust. Connecticut Land Conservation Council and American Farmland Trust can be approached for technical assistance.

17. Cho S., Li K., Migliorato H., Rauch-Kacenski L., & Salzman T., (2016). The Case for Community Land Trust. Retrieved (2/4/2019) from <https://as.tufts.edu/uep/sites/all/themes/asbase/assets/documents/fieldProjectReports/2016/caseCommunityLandTrusts.pdf>

2. Designate Agriculture Sites on the City's Existing Land Use Map

The City should designate urban garden sites on the Existing Land Use Map. Subsequent revisions to this Urban Agriculture Master Plan should re-investigate the locations and update the designation of these sites.

3. Conduct Research into Sites Identified for Potential Agricultural Operations

Vacant lots exist throughout Bridgeport and may provide opportunities to expand gardening operations. As garden space demand and organizational capacity rise, the implementation committee should further research the opportunity to activate these spaces. At least once every five years, vacant lots should be re-analyzed and new potential gardening lots should be added.

4. Establish a Uniform City-Owned Vacant Lot Leasing Process

The implementation committee should work with the City to create a uniform process for which gardeners and nonprofits can enter into agreement with the City to lease vacant plots of land. The uniform process would include such items as identifying a primary City contact and posting information about the urban agriculture lot-lease program on the City's website. A sample lease form should be drafted and required for all future land leases. Lots previously leased without this form should complete it as soon as possible, or upon the expiration of their current lease.

5. Expand Agriculture Uses in the City's Zoning Ordinances

Bridgeport's zoning regulations do not explicitly address urban agriculture. The Food Policy Council can work with the City to expand urban agriculture activities by creating an appropriate definition and allowing the use through the city. The American Planning Association recommends adopting zoning regulations for urban agriculture that consider issues affecting private lands such as livestock,

location and size of parcels, intensity of use, and amount of parking (Mukherji, Morales, 2010.)¹⁸

6. Amend City Code to Make Livestock Ownership More Accessible

Residents have described Bridgeport's Code of Ordinances to be prohibitive for those looking to raise livestock on a small-scale basis and does not define regulations for any larger scale. The Food Policy Council should work with the City to amend the Code of Ordinances to provide workable regulations for livestock farmers.¹⁶

C. DEVELOP SUPPORT EFFORTS FOR AGRICULTURAL ORGANIZATIONS, GARDENERS, AND FARMERS

1. Increase Outreach and Fundraising for Agricultural Operations

As the Bridgeport agriculture network is strengthened and expanded, support is needed to involve more gardeners and fund organizations which support community agriculture sites. During Plan outreach, many community members discussed a general lack of awareness of gardening opportunities and how to become involved. The Food Policy Council and gardening organizations should develop non-traditional methods to engage new gardeners. The same team should develop a fundraising strategy for organizations providing the framework for Bridgeport's agriculture operations.

2. Create an Agriculture Web Page

The Food Policy Council should create a webpage for residents to find information and resources about agriculture. Points of contact, maps, and agriculture organizations should be listed. This page can be linked to the City's website.

18. Mukherji N. & Morales A., (2010). Zoning for Urban Agriculture. Retrieved (2/7/2019) from <https://www-static.bouldercolorado.gov/docs/mar-1-201304100938.pdf>



Bridgeport-grown carrots are sweet and delicious!

3. Create an Agriculture Networking Group

The implementation committee should provide online and offline opportunities for gardeners to meet and learn from each other. Inviting experts to share knowledge from peer cities and conducting regular conferences will help build the technical capacity of gardeners.

4. Partner with Educational Institutions to Develop Training Programs

The Food Policy Council should partner with the Board of Education to integrate gardening-based programs and training into school curriculum, as most of Bridgeport’s public schools already have gardens. The Food Policy Council should also partner with educational institutions such as Fairfield University, Sacred Heart University, the University of Connecticut, Housatonic Community College, and the University of Bridgeport to develop formal education and training programs for those interested in agriculture. Once these programs are established, agriculture organizations will have the opportunity to connect more Bridgeport public school students and local college students in service and learning opportunities.

5. Develop a Support Structure for Entrepreneurial Gardeners

The implementation committee should research structures developed in other cities which allow

small-scale gardeners to easily sell their goods. This may include developing a how-to guide in cooperation with the City, creating a single business which amalgamates and sells their goods, or a revolving-door entrepreneurship loan program.

D. INCREASE GARDENING ACCESS TO NEIGHBORHOODS OF GREATEST NEED

1. Expand Gardening Network by Establishing Auxiliary Gardens

In many neighborhoods, conditions such as density, lack of suitable or available vacant lots and/or yard space and other conditions make traditional garden creation difficult. During Plan outreach, these conditions were discussed in the neighborhoods with populations that need garden access the most. To increase access in these neighborhoods, the implementation committee should:

- Develop a yard sharing program which connects gardeners who lack adequate yard space to neighbors who own yards and are willing to provide access
- Seek permission from the Parks Board and Parks Department to establish community gardens in parks
- Partner with Park City Communities to identify opportunities to establish gardens in their developments
- Seek permission from Public Facilities to grant community gardeners access to underutilized school gardens

2. Increase Walking and Mobility Infrastructure Around Agriculture Sites

During Plan outreach, feedback indicated that many subsistence gardeners have limited access to personal vehicles and/or public transportation, which can make getting to agriculture sites difficult. To lower this barrier, the Food Policy Council should work with the City to provide new and upgraded sidewalks and pedestrian crossings, and implement mobility routes (for bicycles, e-bikes, and e-scooters) along heavily travelled corridors. Implementing mobility parking and rentals near agriculture sites will further ease access barriers.

E. ESTABLISH UNIFORM STANDARDS FOR AGRICULTURE SITE DESIGN AND MANAGEMENT

To provide their range of social, environmental, health and economic benefits, gardens must be welcoming to the neighborhood, well kept, easy to identify, and well organized all year long. The implementation committee and the City can work together to develop:

1. Uniform Standards for Site Design Including, but not limited to:

- Site screening procedures such as soil testing, neighborhood conditions, and drive-up access
- Site protection such as fencing and security
- Water access and water conservation
- Stormwater drainage
- Design of growing structures such as garden beds, hoop houses, etc.
- Storage requirements for tools and equipment

- Compatibility with American Disabilities Act requirements

2. Uniform Management Practices Including, but not limited to:

- Roles and responsibilities of garden captains and gardeners
- Access and maintenance schedules for gardens on City and school lots
- Grounds maintenance to address issues such as invasive species and pest management, clean-ups, and ground cover
- Debris removal requirements and process
- On-site composting guidelines
- Resources for site beautification

The City will require that garden leadership will abide by these standards. In the short term, the implementation committee will be available to advise garden leadership on meeting these standards. In the long term, a community gardening network with one point of contact for the City should be tasked with ensuring gardens are up to standard.



5. Appendices

HISTORY OF GARDENING AND FARMING IN BRIDGEPORT

The following information on the history of community gardening and farming in Bridgeport is adapted from a report titled *History of Bridgeport Urban Garden Program* (Halstead, 2017),¹⁹ and through conversations with GVI.

1980–1990

- Bridgeport Community Garden Program was founded by East Side Neighborhood Housing Services (NHS) in 1980. NHS created ten gardens on city lots in 1981 and 1982, which was funded through the Community Development Block Grant program. NHS partnered with the UCONN Cooperative Extension Program to support the gardens.
- The City of Bridgeport Redevelopment Agency subsequently took over administration of gardens.
- Community Development Block Grant (CDBG) program funding was provided to Bridgeport Urban Gardens (BUG) for garden development and maintenance.

1991–2005

- Some gardens were relocated due to real estate developments, and significant funding cuts hurt the program, including CDBG funding cuts. Without administrative support, garden leadership was absent in some gardens and the image of the program suffered due to overgrown gardens.

2006–2011

- Bridgeport Community Land Trust (BCLT) was formed and received funding from the CT Department of Energy and Environmental Protection (DEEP) and local foundations.
- BCLT operated with the support of volunteer groups from Sacred Heart University, Fairfield University, Habitat for Humanity and United Way.
- The garden program was outsourced to Groundwork Bridgeport in early 2007.
- City funding for the garden program was eliminated.
- DEEP funds were used to install new sidewalks, water lines, fencing, signs, raised beds/topsoil, tools, and for other supplies.
- In 2009, the City committed to paying gardens' water bills going forward. By 2010, 18 gardens were well occupied, with nearly 150 individual family plots. BCLT partnered with organizations to offer cooking demonstrations and donate produce to soup kitchens, churches and homeless shelters. Re-entry programs became involved in gardens.

¹⁹ Halstead, R., (2017). *History of Bridgeport Urban Garden Program*



2006–2011

In 2010, BCLT received additional grant funding through DEEP. Five new gardens were built. BCLT established a farm stand with garden produce at the corner of North Avenue and Park Avenue.

MetroCrops, an indoor hydroponic farm, was founded in 2010. It was funded by a four-year USDA research grant, and located in a former manufacturing building on River Street.

GVI built Bridgeport's first School Garden at Park City Magnet School in 2010.

2011– PRESENT

Green Village Initiative (GVI) worked with the City of Bridgeport to establish another 22 school gardens at Bridgeport public schools.

Through a collaborative effort between GVI and Cook and Grow (a Bridgeport non-profit organization focused on culinary education for children), the Michelle Obama teaching garden was established at the Burroughs – Saden branch of the Bridgeport Public Library.

In 2012, GVI established Bridgeport's first urban farm, Reservoir Community Farm, with a \$1, 5-year renewable lease from the City of Bridgeport. The previously abandoned 1.7-acre site was transformed into a hub of agriculture, skill building, and youth development. Forty community garden plots were included, providing space for neighbors to grow their own food.

In 2014, BCLT transferred several of its assets to Urban Roots. Urban Roots merged with Green Village Initiative, which adopted 12 community gardens.

In 2016, GVI partnered with Sacred Heart University to develop School Garden Lesson Plans (Grades K–6) within Bridgeport curriculum standards, to facilitate garden education during class time. The lesson plans are available to all teachers and the general public on GVI's website.

In 2018, one of GVI's gardens on privately-owned land, the Lafayette Community Garden, was closed due to new development.

FINANCING

Several private and public funding sources are available to fund agricultural efforts in cities. The following information is adapted from USDA Agricultural toolkit²⁰ and other private sources. This is not a comprehensive list of all grants for urban agriculture. Still, it may be considered as a starting point for beginning farmers, entrepreneurs, and non-profits. All potential grant applicants should periodically check the web links listed below each grant to identify grant availability, deadlines, requirements, etc.

1. USDA Community Food Projects Competitive Grants Program (CFPCGP):

Funds programs for equipping and marketing local food producers, increasing reliability of local food supply, and planning projects for long term food access solutions.

<https://nifa.usda.gov/funding-opportunity/community-food-projects-cfp-competitive-grants-program>

2. USDA Beginning Farmer and Rancher Development Program (BFRDP):

Funds organizations for education, mentoring, and technical assistance initiatives for beginning farmers or ranchers.

<https://nifa.usda.gov/program/beginning-farmer-and-rancher-development-program-bfrdp>

3. The Fruit Tree Planting Foundation (FTPF):

An international nonprofit charity dedicated to planting fruitful trees and plants to alleviate world hunger, combat climate change, strengthen communities, and improve the surrounding air, soil, and water.

<http://www.ftpf.org/>

4. USDA Farmers Market Promotion and Education Grants:

Funds efforts to increase domestic consumption and/or access locally and regionally produced agricultural products, and to develop new market opportunities for farm/ranch operations.

<https://www.ams.usda.gov/services/grants/fmpp>

5. USDA Farm Service Agency (FSA)'s Farm Loan Programs:

Funds farmers to start, improve, expand, transition, market, and strengthen family farming and ranching operations, including urban farmers and rooftop operations.

<https://www.fsa.usda.gov/programs-and-services/farm-loan-programs/>

6. Sustainable Agriculture Research and Education (SARE) Program:

Funds research and education projects in sustainable agriculture, including urban agriculture.

<https://www.northeastsare.org/Grants/Get-a-Grant>

7. USDA's Agricultural Marketing Service:

Funds a variety of programs aimed to expand farmers markets and other local food sources.

<https://www.ams.usda.gov/services/grants>

8. USDA's Value Added Producer Grants:

Funds agricultural producers entering into value-added activities related to the processing and/or marketing of new products.

<https://www.rd.usda.gov/programs-services/value-added-producer-grants>

²⁰ Toner, E., & Matthews, A., & Jose, M. (2016). Urban Agriculture Toolkit. Retrieved (5/12/19) from: <https://www.usda.gov/sites/default/files/documents/urban-agriculture-toolkit.pdf>

9. **CTDEEP's Open Space and Watershed Acquisition Grant Program:**
Program funded through the Community Investment Act that provides assistance to nonprofit land conservation organizations to acquire and for open space or community gardens.
https://www.ct.gov/Deep/cwp/view.asp?a=2706&q=323834&deepNav_GID=1641

10. **Whole Kids Foundation Grants:**
Private Funding Sources: Supported by Whole Foods Market, this grant funds activities to support new and existing school gardens and educational beehives.
<https://www.wholekidsfoundation.org/programs>

11. **ScottsMiracle-Gro Foundation Grants:**
ScottsMiracle-Gro provides a variety of grants to support programs that connect children to farms and provide food education services.
<https://scottsmiraclegro.com/responsibility/foundation/enhancement/>

OTHER TECHNICAL RESOURCES

1. **EPA: Urban Farm Business Plan Handbook**
https://www.epa.gov/sites/production/files/2015-10/documents/1.urban_farm_business_plan_handbook_091511_508.pdf

2. **Sustainable Economies Law Center: Urban Land Trust Case Studies**
<http://www.urbanaglaw.org/LandingThumbnails/2012/06/UA-Land-Trust-Case-Studies.pdf>

3. **EPA: Brownfields Guide for Safe Gardening Practices**
https://www.epa.gov/sites/production/files/2015-09/documents/bf_urban_ag.pdf

4. **Web Soil Survey**
<https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>

5. **Cornell University: Small Farms Programs**
<https://smallfarms.cornell.edu/>

6. **New Orleans Food and Farm Network: Farm Financing Reference Manual**
<https://www.noffn.org/resources-1>

7. **Ohio State University Extension: Dig In! A Guide for Starting a Community Garden**
https://cuyahoga.osu.edu/sites/cuyahoga/files/imce/Misc_Files/ANR/Start%20Up%20Guide%20-%20Dig%20In.pdf

8. **Leopold Center for Sustainable Agriculture: Municipal Zoning for Local Foods**
<https://blogs.extension.iastate.edu/planningBLUZ/files/2012/01/ZONING-FOR-LOCAL-FOODS-GUIDEBOOK.pdf>

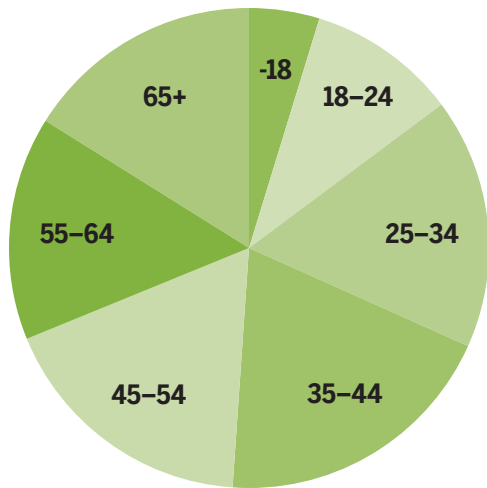
SURVEY RESPONSES

Below are graphs that represent survey responses from the 450 participants. The project team worked to find the root issues facing urban agriculture in Bridgeport, as opined by a diverse cross section of the community. The survey, along with community conversations and the project advisory team guided the formation of recommendations for this master plan.

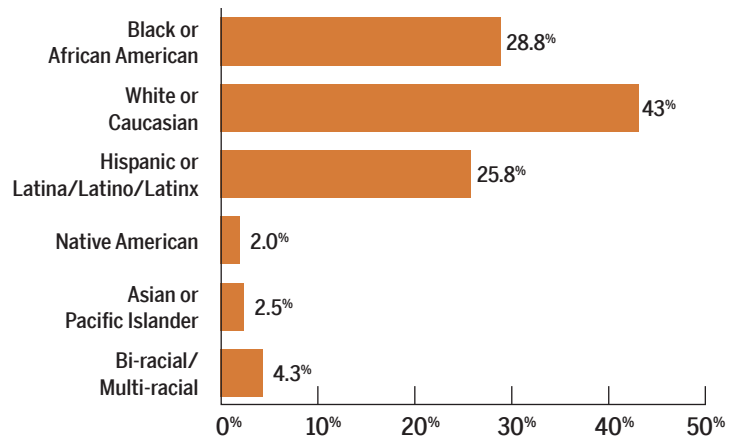
Demographics of Respondents

The demographic make-up of survey respondents was highly diverse in age, but slightly less diverse in racial identity (43.4% white) than the population of Bridgeport (40.4% white)⁴. The majority of respondents have lived in Bridgeport for 10 years or more.

AGE

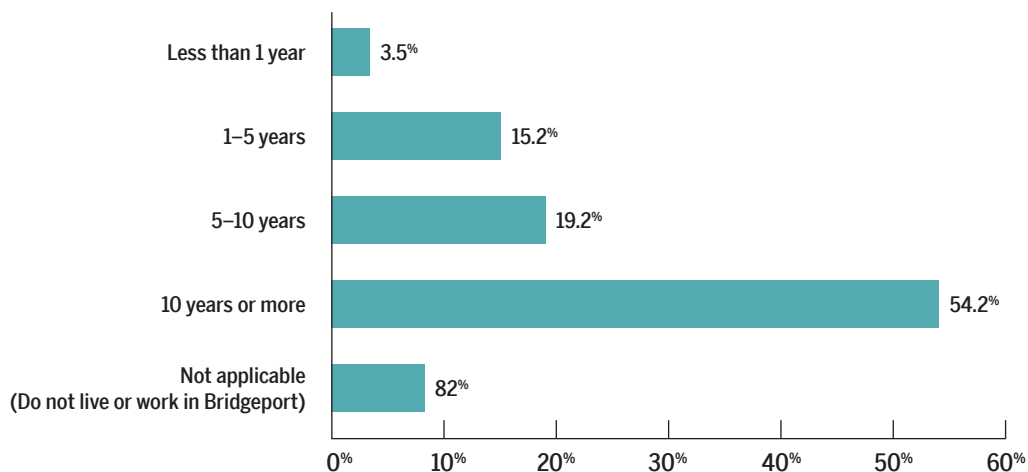


RACIAL IDENTITIES*



*Total exceeds 100% due to some respondents selecting more than one racial identity.

LENGTH OF TIME RESPONDENTS HAVE LIVED OR WORKED IN BRIDGEPORT

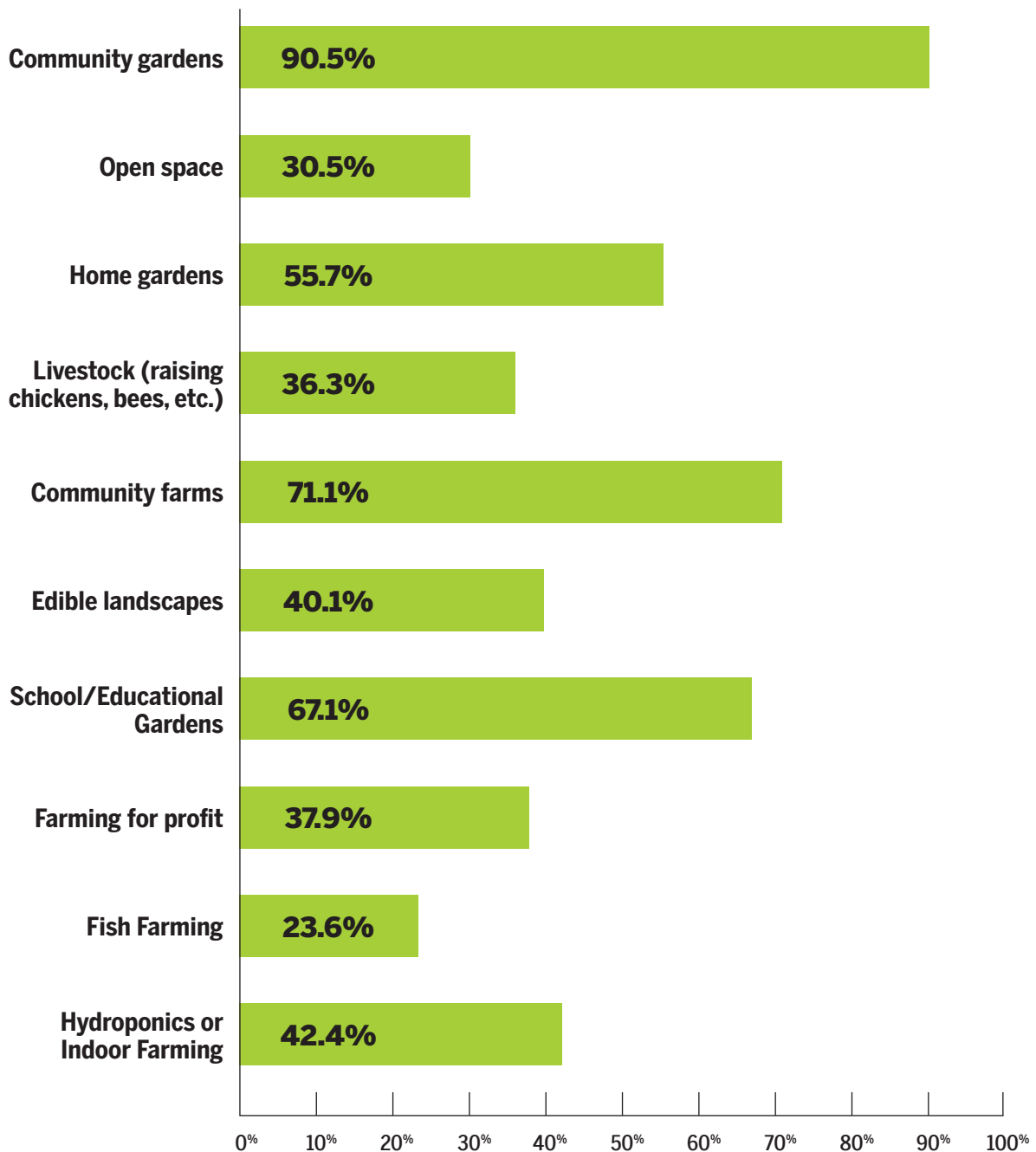


Respondents' Input on Urban Agriculture in Bridgeport

The below charts of survey responses corroborate the key themes discussed in the Plan. Community gardens, community farms, school gardens and home gardens were mentioned by most respondents when asked to define urban agriculture. Priorities for the Plan were communicated as protecting gardens on city-owned lots and increasing availability of Bridgeport-grown food in neighborhoods. When asked about the primary barriers to enhancing urban agriculture in Bridgeport, the following themes were noted: lack of citywide policy and guidance to gardeners, lack of agricultural skills and training, and lack of awareness on how to get involved in gardens.

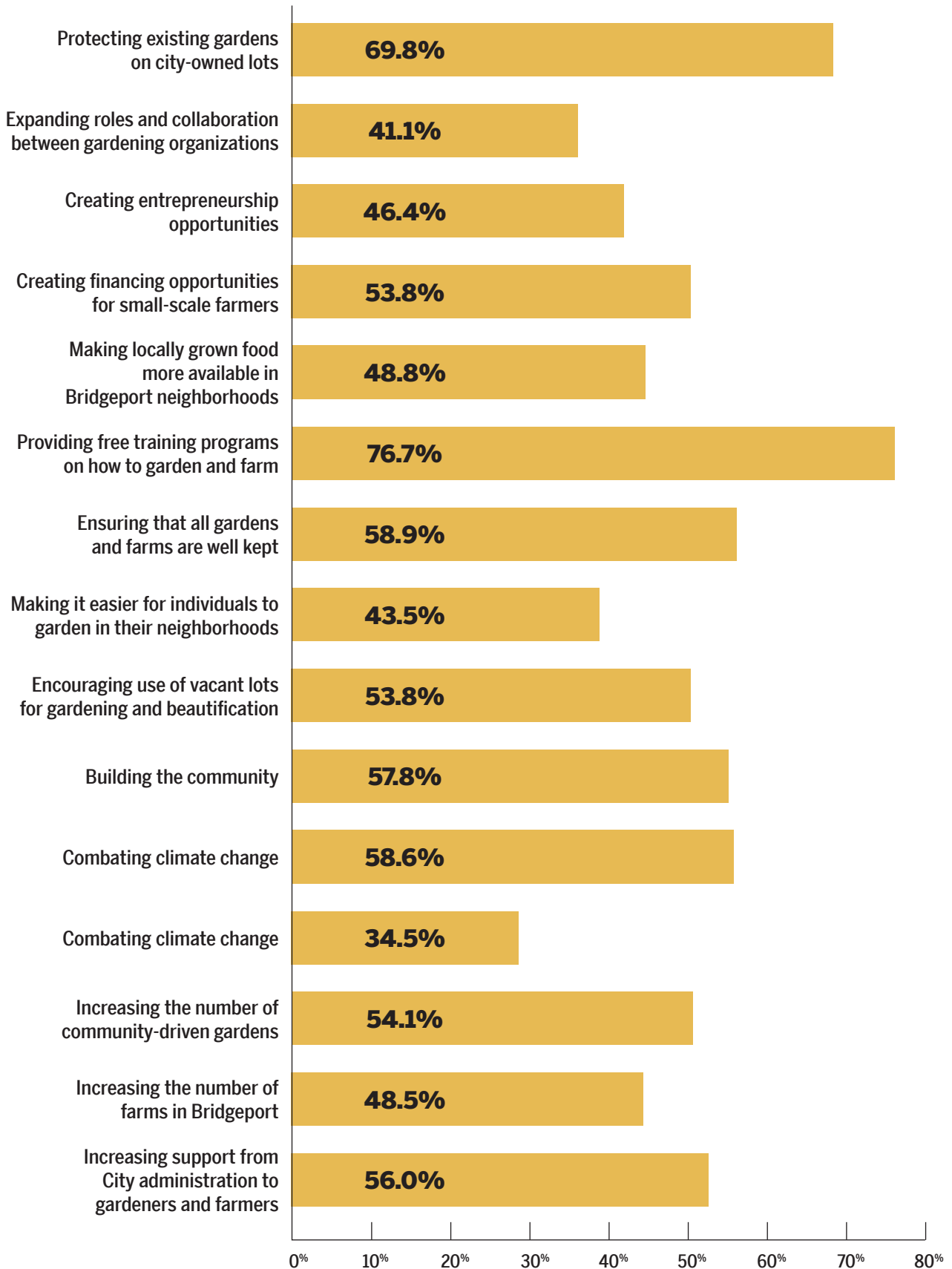
DEFINING URBAN AGRICULTURE

When asked to define urban agriculture, respondents chose the following options.



PRIORITIES OF THE URBAN AGRICULTURE MASTER PLAN

When asked to prioritize aspects of the Plan, respondents chose the following options.



BARRIERS TO ENHANCING URBAN AGRICULTURE

When asked to identify the primary barriers to enhanced urban agriculture in Bridgeport, respondents chose the following options.

