

Integrating Re-Use of Abandoned Properties for Healthy Food Options in Trenton, New Jersey:

Community Gardener Survey and Focus Groups

Draft Report

Concurrently with the vacant property survey, the Rutgers Center for Urban Environmental Sustainability (CUES) and Isles also collected data on community gardening in Trenton and residents' and teachers' perspectives on food access. Questionnaires were directed to community gardeners, and asked about their key experiences in their garden sites, perspectives on food access in Trenton, demographics, and the relationship with the Isles Garden Support Network.

Methods and response rate

We held two focus groups over the summer of 2014 to collect information from a broader set of people; in addition to community gardeners, non-gardening residents, teachers, and residents working in various capacities with non-profit organizations and government to improve food access in Trenton. We discussed the relationship between vacant properties and food access. There were 13 participants in the focus groups and 49 community gardener questionnaires were completed. These questionnaires represented 25 community gardens across Trenton (see map in Figure 1). An initial gardener event, hosted by Isles, introduced the project to garden leaders who then completed surveys of their own. After that, we collected surveys in-person, over the phone, and via a web survey. 42 of the surveys were completed in-person or over the phone by the research team, while the remainder were completed by gardeners using a web survey. Although the total number of community gardeners in Trenton is unknown, Isles has a list of 99 gardeners with contact information that we used. Out of the 99 people on the list, seven were not reachable due to incorrect telephone numbers and 11 people were no longer community gardeners. This reduced our sample frame to 81 people, and we collected surveys from 35 of these gardeners. From this list only, we reached a 43% response rate; however, additional gardeners were surveyed through in-person and web methods.

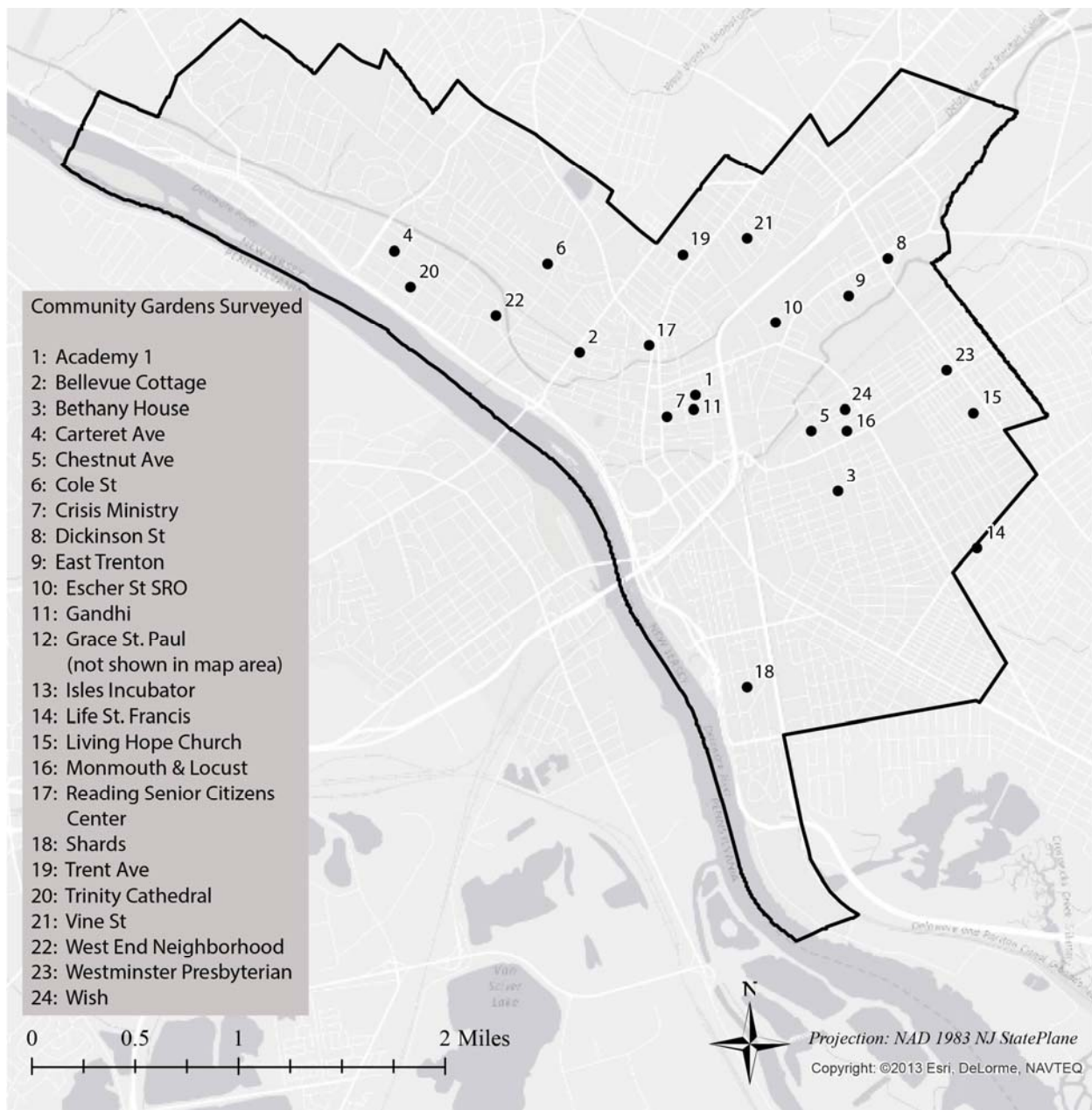


Figure 1. Map of community gardens with members who participated in the survey







Community gardener profile

On average, respondents joined a community garden in Trenton in 2008; they range from having just started this year to having been active since the early 1990s. The average age of respondents is 52, ranging from 21 to 82. Minors were not asked to participate. A range of income classes and race/ethnicity is represented in the survey (see section on demographics, below). Most respondents, however, were born in the U.S. and identify as African-American or White.

Getting to the garden: Location is important

The ease with which people can get to their community garden is likely to play a big part in how frequently they go there and the garden's overall productivity and social atmosphere. Gardening must be integrated into people's normal routines to be successful and enjoyable. With this in mind, it is important to understand community gardens in the context of how people get to them. In our survey, community gardeners use a variety of ways to get to their garden: 53% walk, 57% use a car, and 38% use other means such as public transit or bicycling (Table 1). 18% of gardeners use more than one form of transportation, meaning that on some days they walk while on other days they take a car or bus. Most (82%), however, use only one method. Overall, it is easy for gardeners to get to their gardens—74% reported having no problems getting to the garden site (Table 4). Given the number of ways they do so, however, gardening is woven into their daily routines in many ways. Getting to community gardens is likely to be a function of neighborhood walkability and availability of private and public transportation options. Further research is needed to better understand where gardeners want the garden to be relative to the other aspects of their lives—close to home, work, or other places that are part of their routes in and around Trenton. Community gardens do not necessarily need to be within close walking distance of people's home, but they certainly do need to be located in places that gardeners can easily incorporate them into their daily or weekly spatial routines. Site selection thus depends in large part on the specific target population. Although GIS modeling and identifying areas of need by mapping existing food access points can be a starting point in planning new community garden sites, the end users' actual use of space is a fundamental consideration in site location.

Table 1: How do you get to the community garden (select all that apply)?

Answer		Response	%
Walk		26	53%
Car		28	57%
Bus		5	10%
Train		4	8%
Bicycle		6	12%
Other		4	8%

Respondents tend to visit their gardens frequently—on average, they make trips to the garden about 5 days per week. This suggests that gardeners in our survey find garden location easy to get to and that they have integrated their gardening into their normal routines. It does not tell us, however, about any people that have stopped gardening because they could not easily get to the site on a regular basis. Taken together, these findings stress the need to better understand the complex ways in which community gardens may or may not fit easily into residents' lives—in other words, just because a garden is in a location deemed to be “in need” does not mean people will use it.

Outputs and Outcomes: Where does the food go, and what else happens through gardening?

Community gardeners distribute the food they grow in a variety of ways (Table 2). Although one might assume that community gardeners are there to grow food for their own household, only 75% reported that they take the food home. Most people who do take food home also distribute it elsewhere as well—85% of respondents share the food with other people. 31% donate their food to a church or food bank. 12% use other means such as selling, cooking demonstrations, or community lunches. Furthermore, only 4% responded that they *only* take their food home; that is, nearly all community gardeners distribute food beyond their own household.

Table 2: How do you use the food from your community garden? (select all that apply)

Answer		Response	%
Take it home for eating		36	75%
Share it with other people		41	85%
Donate it to church, food bank, etc.		15	31%
Sell or trade it		1	2%
Other		5	10%

Although food production is an important part of community gardening, there are many other facets to these activities. Exercise, recreation, and neighborhood improvement, for example, are as important to our survey respondents as food itself (Table 3). While the community gardeners surveyed mostly do not see their garden as an income source, many do see it as a way to save money, and as such gardens play a role in household budgets—and by extension, local economies.

Gardeners generally found most of these aspects important, but three in particular stand out as the most agreed-upon responses. Fresh food and neighborhood improvement had the biggest differential between “very important” and “not important” (Figure 2). In other words, gardeners overwhelmingly see fresh food and neighborhood improvement as key outcomes of community gardening.

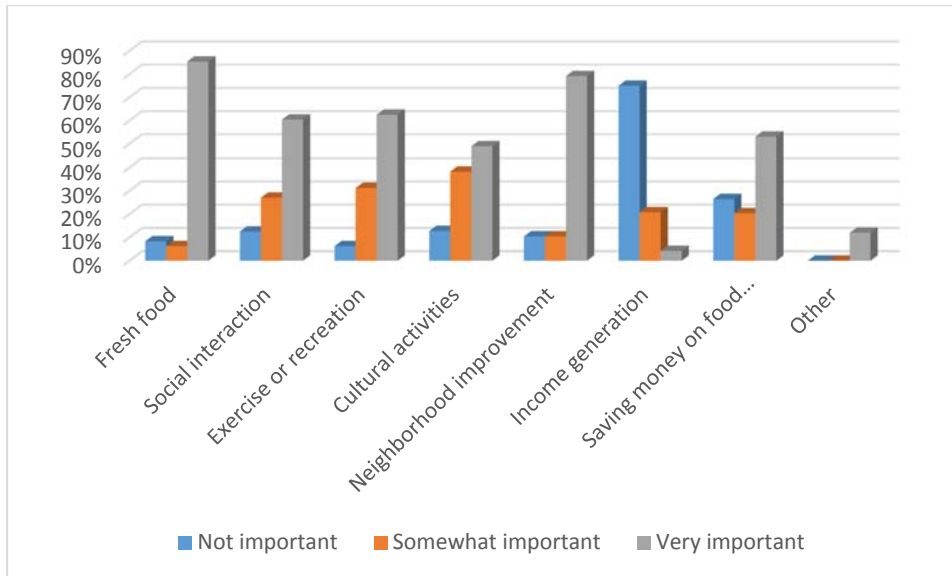


Figure 2: How important to you are the following aspects of community gardening?

Table 3: How important to you are the following aspects of community gardening?

Question	Not important	Somewhat important	Very important	Somewhat or Very Important
Fresh food	8%	6%	85%	92%
Social interaction	13%	27%	60%	88%
Exercise or recreation	6%	31%	63%	94%
Cultural activities	13%	38%	49%	87%
Neighborhood improvement	10%	10%	79%	90%
Income generation	75%	21%	4%	25%
Saving money on food expenses	27%	20%	53%	73%
Other	0%	0%	12%	12%

Challenges

Working in community gardens is rewarding but does not come without its challenges. We asked respondents how much a given set of challenges affects their ability to garden. Weeds and pests are at the top of the list, and they affected half of gardeners either somewhat or a lot. 30% faced challenges in access to materials (soil, tools, etc.) either somewhat or a lot. The third highest rated challenge? Time commitment (26%). Weeds, pests, and time commitment also ranked highest among minor inconveniences—those ranked “a little” challenging to respondents. These results strongly suggest that gardening takes a lot of work, although avid gardeners see it as a labor of love. The policy implications are that while community gardens certainly provide a range of benefits, they are not a cure-all; since it takes a lot of work, residents should not all be expected to willingly participate. In other words, community gardens are an integral part of neighborhood life for many people but they are not easily introduced without proper buy-in and interest on the part of residents. It should be noted, however, that many respondents report no challenges, as clearly shown in Table 4.

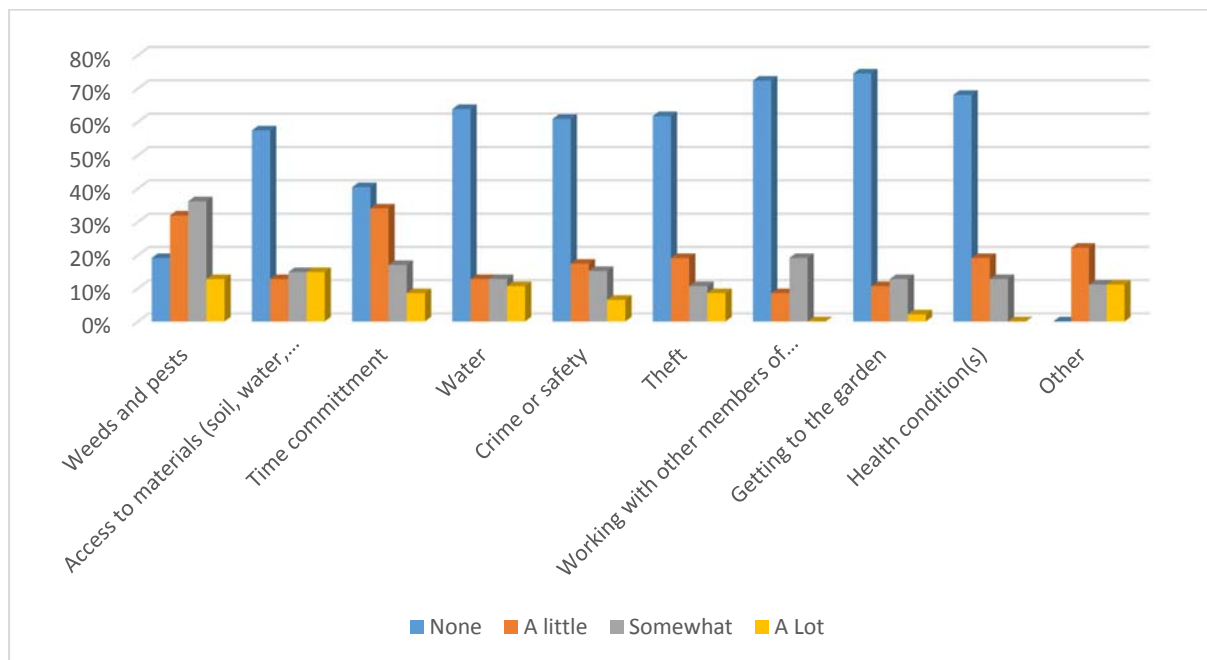


Figure 4: Challenges as experienced by community gardeners

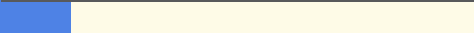



Table 4: How much do the following challenges affect your ability to garden?

Question	None	A little	Somewhat	A Lot	Either “somewhat” or “a lot”
Weeds and pests	19%	32%	36%	13%	49%
Access to materials (soil, tools, etc.)	57%	13%	15%	15%	30%
Time commitment	40%	34%	17%	9%	26%
Water	64%	13%	13%	11%	23%
Crime or safety	61%	17%	15%	7%	22%
Theft	62%	19%	11%	9%	19%
Working with other members of the garden	72%	9%	19%	0%	19%
Getting to the garden	74%	11%	13%	2%	15%
Health condition(s)	68%	19%	13%	0%	13%
Other	0%	22%	11%	11%	22%

Fresh produce in Trenton: Community gardens and shopping

We asked respondents to indicate how much of their households’ fresh fruits and vegetables come from their community garden (none, some, most, or all). Community gardens are indeed a source of fresh produce—85% of the respondents eat food they have grown in the garden (Table 5). Gardeners tend to fall between those who use the garden as a substantial source of fresh produce and those who supplement their household food budgets with the garden. These numbers are divided almost evenly, with 41% getting either most or all of their fresh produce from the garden and 45% using the garden for some of their produce. Only 15% stated that they got no food from the garden, but at least one respondent indicated this is because it was the first year and there had been no time to harvest yet.

Table 5: How much of your fresh fruits and vegetables come from your community garden?

Answer		Response	%
None		7	15%
Some		21	45%
Most		15	32%
All		4	9%
Total		47	100%

We asked people about the amount and quality of the food they get from their community gardening and from shopping. Overall, people are highly satisfied with their gardens, but the shopping options are not entirely seen as negative. We explore these results in more detail after explaining the demographic characteristics of the sample.

Community Garden

Table 6: Are you satisfied with the amount of fresh produce you can get from your community garden?




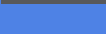


Answer		%
Yes		72%
Maybe / I don't know		6%
No		21%
Total		100%

Table 7: Are you satisfied with the quality of fresh produce you can get from your community garden?

Answer		%
Yes		81%
Maybe / I don't know		6%
No		13%
Total		100%

Shopping

Table 8: Are you satisfied with the amount of fresh produce you can get from shopping in Trenton?







Answer		%
Yes		50%
Maybe / I don't know		15%
No		35%
Total		100%

Table 9: Are you satisfied with the quality of fresh produce you can get from shopping in Trenton?

Answer		%
Yes		40%
Maybe / I don't know		20%
No		40%
Total		100%

Demographics

In terms of income, Trenton has a median household income of \$36,727 (Source: U.S. Census, 2008-2012 American Community Survey 5-Year Estimates). Respondents reported their household income for 2013 as follows:

Answer		Response	%
Less than \$10,000		4	11%
\$10,000 - 14,999		2	6%
\$15,000 - 19,999		3	8%
\$20,000 - 29,999		5	14%
\$30,000 - 39,999		5	14%
\$40,000 - 49,999		3	8%
\$50,000 - 74,999		8	22%
\$75,000 or more		6	17%
Total		36	100%

Respondents reported the following race and ethnicity information about themselves:

Answer		Response	%
American Indian or Alaska Native		1	2%
Asian American		2	5%
Black or African American		22	50%
Hispanic or Latino		5	11%
Native Hawaiian or Other Pacific Islander		0	0%
White		16	36%
Multiracial		2	5%
Other		3	7%

46 people provided information on their country of birth. Respondents were born in the U.S. (67%), Jamaica (11%), Other (22%: Bangladesh, Dominican Republic, Guatemala, Korea, Liberia, India, Papua New Guinea, Romania).

Community gardening and food access across income classes

The survey results are insightful on their own, but they also raise additional questions about how community gardening and food access are experienced by people of different income levels. While people are overwhelmingly happy about the amount and quality of fresh food from their community gardens, the opinions about food shopping are not as enthusiastic. Half of the respondents are satisfied with the amount of fresh food available through shopping in Trenton, and 40% are satisfied with the quality of that food. This is surprising given the constant news about Trenton's status as a "food desert"—we expected satisfaction levels to be much lower. Given the diversity in income levels shown above we then examined whether these shopping opinions are related to income.

We simplified the household income classes to only three categories—less than \$20,000 per year, from \$20,000 to \$50,000, and more than \$50,000—to get a rough estimate of whether the responses are driven by low, middle, or higher income households. Respondents with the lowest household incomes are the most *satisfied with the amount* of fresh food they can get by shopping in Trenton (Figure 5). In contrast, however, the lowest-earning households are the most *dissatisfied with the quality* of that food (Figure 6). This suggests that fresh produce is easily accessible by the families who are least able to travel outside the city to other supermarkets; however, that produce is not of acceptable quality. Furthermore, around half of higher income households are dissatisfied with the selection of fresh produce in Trenton. Although affordability is often a key issue in healthy food access, even those families who are not as constrained by price are likely not able to meet their needs within the city.¹

¹ Walker, Renee E., Christopher R. Keane, and Jessica G. Burke. 2010. "Disparities and access to healthy food in the United States: A review of food deserts literature." *Health & Place* no. 16 (5):876-884.



Figure 5



Figure 6

Transportation is also a factor in food access, which we first discussed in the earlier section on getting to the community garden. Although community gardeners in this survey may find it easy to get to their gardens, they see food shopping as a difficult exercise; this message was conveyed in the focus groups. In our two focus groups, it became apparent that transportation regarding food access more broadly is a widely recognized issue. For families without cars, this can be particularly difficult. Focus group participants pointed out that although food was generally easy to find, *healthy* and *fresh* food was less so. Residents face dilemmas when considering transportation to the places where quality food is available. For example, a resident of Villa Park pointed out that while a corner store might be walkable from home, the Food Bazar might be difficult to access even though it is a great source for good quality healthy food. This sentiment

was echoed around the room, with others pointing out that “it’s hard to get to places,” and “if you’re a family of four, you’re not getting a lot of groceries on the bus.” This last comment reflects how many families without cars try to shop by taking the bus, but find it difficult to carry a week’s worth of groceries on to the bus. Furthermore, another participant, from the Franklin Park area, said that existing bus routes do not go very close to Food Bazaar or other stores with high quality food.

Food access: Joining the need for affordable, healthy food with demand for high quality, pleasant experiences

These findings point to the pressing need to rethink healthy food access to include factors of quality and taste. In Trenton, there is not necessarily a lack of fresh food—there is more likely a lack of good quality fresh food that residents want to eat at prices they can afford. Affordability is well-discussed in the community food security literature, and focus group participants raised this point as well. Affordability and nutrition are not the only two factors that might contribute to better food security, however. Participants contributed more to the food access discussion by making clear their interest in high quality food and a pleasant shopping experience. Indeed, one participant summarized this viewpoint by stating a desire to see an affordable version of Whole Foods in Trenton. Given the survey results that stressed the dissatisfaction with the quality of that fresh food, it is clear that food access is more than calorie counts and nutrition requirements. A resident of the Cadwalader Place area explained that the existence of grocery stores and supermarkets is not enough: “We did have a grocery store but it didn’t do well – it was only open 2-3 years. It smelled bad – things that weren’t fresh (both the product and the people working there).”

In addition, teachers in our focus group argued that the prepared food offered to children needs to be desirable—and it often is not. As some of the teachers explained, the apples at school lunches are, by definition, a healthy snack. Students were not interested in eating them, however, because they were often overripe, bruised, or not tasty. One focus group participant said that when she had cut apples into slices, they were more attractive to the children. The point here is that attractive preparation and presentation of healthy food is also a key lesson. In sum, families in Trenton want the same kind of food access and shopping experience as would any suburban family.

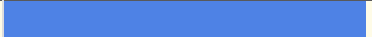







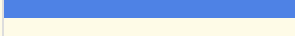



Building food access with existing assets

Although much of the literature on food security in low-income cities focuses on bringing in supermarkets from the outside, our focus groups participants argued that there are ways to develop local assets that can increase healthy food access. A key point they raised is the need to educate residents on entrepreneurship and business management so that they can start the food businesses that are needed in the city. As one participant noted: “people are starving for the opportunity to do something,” but simply do not have the skills to start or know where to turn for help. Another participant suggested micro financing as an avenue to support business start-ups. A second key point to emerge concerned the process to obtain a vacant property from the city. Low-income residents that might be interested in starting a food business could also benefit from inexpensive vacant properties. Although outside developers and higher-income residents might

be familiar with the process—or have the time and education to learn it—lower-income residents might simply be unaware of how to do it or find the bureaucracy intimidating. These two points, education in business management and how to obtain vacant properties, are aspects that focus group participants felt that Isles is well-suited to address in their work. Comments such as these show just how wide-ranging the options are to address food access; together with the comments above, they show how residents’ perspectives are crucial pieces for building food access programs.

Isles Garden Support Network

The development of local assets return us to community gardening, which is something that Isles prioritizes through its Garden Support Network (IGSN). We asked survey respondents to list which IGSN services they had used in the past year. The most frequent services include seed and plant donations, and education through workshops and technical assistance.

Answer		Response	%
Seeds		35	76%
Plants		36	78%
Tilling		14	30%
Water access		18	39%
Tools		22	48%
Volunteer support		21	46%
Attended workshop		29	63%
Conflict Resolution		3	7%
Technical support/advice		29	63%
Help with leasing city-owned land		5	11%
Other		9	20%
None		4	9%

Other
Email Blast Newsletter. Good communication
Mowed the lawns
Part of 1st incubator garden with Isles this year
Built raised beds
Built raised planting boxes and perennial beds and rain garden
Outreach to other senior centers
Leading their voice to policy discussions.
Fertilizer

Conclusions and Recommendations

The findings from this portion of the research demonstrate the importance of engaging residents in the planning process to increase healthy food options. Community gardens play a major role in

food production in Trenton, but people experience them in different ways. Food itself is a major output; for some people it is a major source of fresh food while for others it is a supplement. Regarding food systems planning, the results below stress the importance of understanding the context of residents' lives in relation to location decisions on where to start food projects. Consumers must be able to reach these places easily, and they must also be able to easily integrate trips to the community garden, supermarket, or other location into their daily routines. Furthermore, residents' feedback suggests that healthy food options need to be considered among broader quality-of-life factors. Not only is healthy food needed in the city, but it also should be affordable and tasty, presented attractively and through a pleasant shopping experience.

Appendix 1

We asked an open-ended question: How else can Isles Garden Support Network support your gardening? These responses are listed below.

- Isles is going a good job so far, nothing new.
- Figured out the type of dirt that needs to go into the incubator before the planting season (respondent thinks this has already been corrected for next year). Incubator needs trees to help block direct sunlight onto the garden patches.
- Children's intrusion garden at church facility, summer camp, 5 week long program... this alerted responses dramatically. : She would like for Jim to show them how to construct larger container gardens.
- Interested in learning about effective methods of donating extra produce. He is interested in eventually buying the garden and converting to commercial production. Wants a Jersey Fresh sign. Wants soil tested...that lot has been used as a garden for 20+ years.
- Vine St is now more of a flower garden. Too much theft and vandalism at the garden, if he can get a fence he will grow food once again. Very interested in ISLES helping him to put a perimeter fence. He has been trying for this for the last 6 years.
- None
- ISLES is very good about helping. Need extra gardeners, they have space.
- ISLES is going a great job!
- Need rain water collection barrels.
- Have ISLES staff available at scheduled times for incubator questions/concerns (hands-on).
- Garden needs more compost, maybe even constructing their own compost site.
- If there are more wine barrels we would use them. Isles has been a great help. Maybe help get the word out for our Harvest Community Day.
- More soil is needed. A water hose to water garden. Trash bin.
- Continue Garden workshop, volunteer support
- Continued volunteer support, garden workshops, technical support and advice.
- Anything they do will help
- Workshops would be great for our gardeners
- More flower seedlings
- Nothing, Jim does an excellent job providing the WENA with what we need.
- Perhaps schedule a good time to meet with bunch of gardeners in the garden and discuss common or individual issues/concerns.
- Keep doing what they are doing!
- Help with presentations to seniors. Center has large number of indoor plants that need to be repotted.
- Keep doing what they are doing! More volunteers/gardeners coordination is the only wish.
- Need cheaper access to soil, also some limited insecticide spraying
- Needs mulch. Very happy with ISLES
- Needs help plowing and additional volunteer. Also would love some plastic green house. Very happy about the recent soil testing!

- Need soil and larger container pots. He would like more young people to be involved at the garden.
- They have done everything he has asked of ISLES.
- Gardener stated that there is a need for more soil
- Gardener mentioned that someone from Isles used to come by once in a while to check on things/see if there was anything needed - couldn't get a firm answer if this was something gardener would like to see
- She wants some plants every year: okra, greens, peppers.
- Very happy with current level of outreach and support.
- Clone Jim
- Love the raised beds they built for us!
- Continue with plant distribution - Excellent in 2014. Continue technical support
- Continue plant and seed distribution and technical help. Bethany Garden also benefited greatly from having a member of Isles/Food Corp living next to and tending the garden.
- Trapping ground hogs and relocating. Garden with these pests is almost useless!!!