

Helena Community Gardens Impact Assessment: Final Report

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Overview

In February of 2016, we implemented a program evaluation in close collaboration with Helena Community Gardens' (HCG's) board members and garden managers (GMs) to evaluate HCG's progress towards its mission and vision and to gain a better understanding of gardeners' goals. After reviewing existing data sources and HCG's inputs and activities, we distributed semi-structured surveys designed to assess characteristics of gardeners and indicators of program impact and effectiveness. This report is based on descriptive analyses of 110 surveys collected from March 27th through June 15th, 2016. We found that since almost a third of gardeners share plots with people outside their household, HCG provides around 200 gardening households with access to healthy and affordable food, at least half of whom would otherwise have no space to garden. At the same time, through gardeners' distribution of their produce, HCG extends local food to gardeners' friends, neighbors, and Helena Food Share recipients. In line with its mission, HCG expands gardening knowledge of experienced and inexperienced gardeners, and it is actively building gardens. This report begins with an introduction to Helena Community Gardens, a brief summary of known benefits of community gardens in general, an overview of our research methods, a discussion of our findings in relation to HCG's mission and vision, and a synopsis of HCG's accomplishments and recommendations for addressing current challenges.

What is Helena Community Gardens?

Helena Community Gardens (HCG) is a 501(c)(3) non-profit organization dedicated to making garden space accessible to all residents of Helena, Montana. First known as the Growing Community Project, HCG was established in 2007 through a partnership between two non-profit organizations: Working for Equality and Economic Liberation (WEEL) and Alternative Energy Resources Organization (AERO). **HCG's mission is to “build gardens, provide the tools and knowledge to grow food, and increase access to healthy and affordable food.”**

The organization has seven guiding vision statements:

1. Everyone in Helena is within walking distance of a community garden.
2. All community gardens are accessible to everyone.
3. Everyone in Helena has access to healthy, affordable, fresh foods.
4. People of all ages know how to grow and harvest their own foods – and do!
5. Helena Food Share and their clients benefit from the production grown in our partner gardens.
6. A sense of community and common purpose is achieved; relationships within neighborhoods and gardeners are enhanced.
7. The environment benefits through the open space gardens provide, organic practices, and the reduced fossil fuels necessary to access food.

Table 1: Summary Information for HCG’s Community Gardens

Garden	Total number of plots	Arable land (sq. feet)	Property owner	Total number registered gardeners
Bausch Park	18	1,111	State of Montana/YMCA	12
Cooney Homes	10	320	Cooney Healthcare, Inc	5
Cruse Overlook	24	656	St. Paul’s United Methodist Church	16
Janet Street Park	27	4,425	City of Helena	7
Jubilee	40	3,200	Saint Mary Catholic Community	23
Plymouth	27	3,680	Plymouth Congregational Church	27
Selma Held Park	41	7,248	City of Helena	30
Sixth Ward Park	<i>Garden still under construction as of June 2016</i>			
Waukesha Park	40	32,000	City of Helena	34
TOTAL	227	52,640	NA	154

By 2015, HCG was managing seven community gardens in Helena: Bausch Park Garden, Cooney Homes Garden, Cruse Overlook Garden, Janet Street Park Garden, Plymouth Garden, Selma Held Park Garden, and Waukesha Park Garden. In 2016, HCG added St. Mary Parish's Jubilee Garden and was constructing Sixth Ward Park Garden. Table 1 provides a list of HCG's current nine gardens and shows the number of garden plots, total arable land (gardening area), and registered gardeners in each garden as of June 15, 2016. Garden locations within Helena are shown on the map on page 15. While HCG manages all nine gardens, property owners vary, as shown in Table 1, and a notable characteristic is HCG's partnership with three local, faith-based communities.

Almost exclusively run by volunteers, HCG's total operating budget in 2015 was \$14,094. It has one part-time employee who works 10 hours per week, and an all-volunteer board comprised of 14 members, two of whom are Co-Chairs. Each garden is managed by one or more volunteer Garden Managers (GMs). As of June 2016, there were a total of 14 GMs. All gardeners are asked to invest volunteer time in their garden during the growing season.

Benefits of Community Gardens

To better understand how community gardens can serve the City of Helena, we provide a brief description of what is already known about the benefits of community gardens. Studies of community gardens in the United States and abroad show that community gardens provide numerous and wide-ranging benefits. For individuals, there is increased access to healthy fresh food¹, economic savings, exercise, reduced stress², less obesity³, connection to nature, and to neighbors. Gardeners' family and friends also eat more fresh produce⁴. Eating fresh produce has been found to increase motivation to eat fruits and vegetables regularly throughout the year. Communities gain green space, economic revitalization⁵, reduced crime, higher property values⁶, and stronger community ties. School children and at-risk youth eat better⁷, learn

¹ Jill S. Litt, Mah-J. Soobader, Mark S. Turbin, James W. Hale, Michael Buchenau, and Julie A. Marshall. The Influence of Social Involvement, Neighborhood Aesthetics, and Community Garden Participation on Fruit and Vegetable Consumption. *American Journal of Public Health*, August 2011, Vol. 101, No. 8: pp. 1466-1473

² Van Den Berg, Agnes E., and Mariette H. Custers. 2011. Gardening Promotes Neuroendocrine and Affective Restoration from Stress. *Journal of Health Psychology*. 2011. 16:3-11g2wsz

³ Cathleen D. Zick, Ken R. Smith, Lori Kowaleski-Jones, Claire Uno, and Brittany J. Merrill. Harvesting More Than Vegetables: The Potential Weight Control Benefits of Community Gardening. *American Journal of Public Health*: June 2013, Vol. 103, No. 6, pp. 1110-1115

⁴ Alaimo, Katherine PhD, Elizabeth Packnett MPH, Richard A. Miles BS and Daniel J. Kruger PhD, Fruit and Vegetable Intake among Urban Community Gardeners, *Journal of Nutrition Education and Behavior*, Volume 40, Issue 2, March-April 2008, Pages 94-101

⁵ Schukoske, Jane E. 2000 Community Development through Gardening: State and Local Policies Transforming Urban Open Space. *Legislation and Public Policy*. Vol.3:351

⁶ Been, V. and I. Voicu. 2006. The Effect of Community Gardens on Neighboring Property Values, New York University School of Law, New York University Law and Economics Working Papers Paper 46.

new skills, earn money and are deterred from gang activity⁸. Air quality improves with more green space. Consuming more locally produced food reduces the need for transporting food long distances by truck.

Because all produce from HCG is organic, it does not contain any pesticide or fertilizer residue, and it may have higher nutritional value than crops grown conventionally⁹. Additionally, according to Consumer Reports, some organic produce is more expensive than conventional. They found organic zucchini at most grocery stores to be up to three times as expensive as conventional zucchini; at Safeway, it was 56% more¹⁰. Another study from Maine found organic produce ranging from 44% to 113% more expensive than their conventional counterparts in local grocery stores¹¹. Families who grow organic produce therefore realize significant savings over the cost of organic produce, more even than they save by not purchasing conventionally grown produce.

Study Methods

In this study, we sought to evaluate: 1) how HCG is impacting gardeners, from the perspective of its mission and vision; and 2) gardeners' goals for participating in HCG. We gathered information from board members, garden managers, and existing HCG records, and we created and distributed a survey among gardeners from March 27 to June 15, 2016.

We developed the survey instrument with full participation of the Helena Community Gardens' (HCG's) board and Garden Managers (GMs). The survey includes questions about gardeners' experiences gardening, participation in various HCG programs, how often they eat what they grow, who they garden with and share produce with, and a series of demographic questions. The survey also included open-ended questions where gardeners could convey their successes and fears, motivations, and other comments. The full survey is included in Appendix 1. Gardeners new to HCG ("new gardeners") received a shorter version of the survey, with Section 2 of the survey removed, while gardeners who had previously gardened with HCG ("returning gardeners") received the full length survey. Throughout this report, when we refer to gardeners generally, we are denoting responses from new and returning gardeners. We specify when we are referring to results gathered only from returning gardeners.

⁷ Morris, Jennifer L., and Sheri Zidenberg-Cherr. 2002 Garden-enhanced nutrition curriculum improves fourth-grade school children's knowledge of nutrition and preferences for some vegetables, *Journal of the American Dietetic Association*, Volume 102 Number 1, January 2002 Pages 91-93

⁸ Ober Allen, Julie, Katherine Alaimo, Doris Elam; and Elizabeth Perry. 2008 Growing Vegetables and Values: Benefits of Neighborhood-Based Community Gardens for Youth Development and Nutrition. *Journal of Hunger & Environmental Nutrition*, Volume 3, Issue 4, pages 418 – 439

⁹<http://www.npr.org/sections/thesalt/2014/07/11/330760923/are-organic-vegetables-more-nutritious-after-all>

¹⁰ <http://www.consumerreports.org/cro/news/2015/03/cost-of-organic-food/index.htm>

¹¹<http://www.mofga.org/Publications/MaineOrganicFarmerGardener/Fall2011/PriceDifferences/tabid/1966/>

Table 2: Survey Response Rate by Garden

Garden	Survey response rate
Bausch Park	92%
Cooney Homes	80%
Cruse Overlook	75%
Janet Street Park	14%
Jubilee	74%
Plymouth	70%
Selma Held Park	60%
Sixth Ward Park	<i>Not surveyed</i>
Waukesha Park	85%
TOTAL	72%

We surveyed gardeners from all eight active gardens: Waukesha Park Garden, Bausch Park Garden, Janet Street Park Garden, Selma Held Park Garden, Plymouth Garden, Cruse Overlook Garden, Cooney Homes Garden, and St. Mary’s Jubilee Garden. Sixth Ward Park Garden was still in development and had not registered gardeners at the time of the survey. The numbers of garden plots and registered gardeners vary in each garden, as noted in Table 1. Gardens also varied in how they managed plot sign-ups, some choosing to hold public meetings where gardeners showed up in person, others, usually the smaller gardens, handled sign-ups more informally. When there was a public meeting Pat or Libby were usually available to hand out surveys and answer questions. Pat and Libby, after consultation with the GMs, asked the GMs to request one representative of each garden plot to partake in the survey during registration. GMs, who also garden with HCG, were included in the survey sample.

As of June 15, 2016 there were 154 registered gardeners spread among the eight gardens operating at the time of the survey (see Table 1). A total of 110 surveys were collected and the data entered into a spreadsheet for analysis, including the responses to the open-ended questions. Not all surveys were complete, but all had enough basic data to be included in the final results. Response rates per garden varied from 71% to 92% for all of the gardens except Janet Street, which had a response rate of 14% (see Table 2). The overall response rate for the eight gardens was 72%.

Analysis consisted of calculating frequencies for all the variables, which are reported in the following sections, and comparing some responses by socially significant categories, such as gender and household

income/use of social programs. Written responses were coded thematically and reported numerically, where appropriate, and then used to supplement the quantitative results for greater insight and depth.

Helena Community Gardens' Progress towards Its Mission and Vision

In this section, we discuss what our findings show about Helena Community Gardens' (HCG's) impacts. It is organized thematically in sub-sections based on HCG's mission and vision: food and garden accessibility, gardening knowledge and skills, sense of community, Helena Food Share provision, and environmental sustainability.

Food and Garden Accessibility¹²

The survey results support the conclusion that HCG has increased access to healthy, affordable food by providing a broad swathe of Helena's population with access to gardens. While HCG's gardeners are not perfectly representative of the broader Helena population based on age and income, they are representative of Helena's racial composition. HCG has a mix of experienced and completely inexperienced gardeners, but the majority of gardeners in 2016 have some gardening experience. HCG is serving gardeners who would otherwise have no other place to garden. The survey revealed several constraints to growing food: concerns about time limitations, and typical gardening challenges like weeds, pests, and Helena's climate. Low income and dependence on social assistance are also correlated with consuming less garden-grown produce.

Most gardeners first heard about HCG by word of mouth (41%, n=42), but many learned about HCG from passing by a garden (25%, n=25) or from the website (12%, n=12). The role of churches is significant, as two-thirds of people who marked "other" in the survey indicated learning about HCG from something church-related. Six specifically mentioned St. Mary Catholic Community, which sponsors the newest garden, and three mentioned Plymouth Congregational Church, another sponsor. The only other named church was St. Paul's United Methodist Church, which supports Cruse Overlook.

Of the 110 gardeners surveyed, **47 respondents were new to gardening with HCG, while 63 were returning to one of HCG's gardens.** The ratio of new to returning gardeners is not unusual, since the proportion of new gardeners found in the research on community gardens is often over 50%.¹³ In addition, Jubilee is a new garden, bringing with it primarily people who were new gardeners to HCG.

¹² Vision Statements: 1. Everyone in Helena is within walking distance of a community garden. 2. All community gardens are accessible to everyone. 3. Everyone in Helena has access to healthy, affordable, fresh foods.

¹³ Birky, Joshua. 2009. The modern community garden movement in the United States, master's thesis. <http://scholarcommons.usf.edu/etd/1860>; Blaine, Thomas, Parwinder Gerwal, Ashley Dawes, Darrin Snyder. 2010.

Notably, 28% (n=30) of respondents indicated sharing a plot with someone outside their household. We can therefore conclude that HCG is serving more people and households than suggested by registration data alone. Based on the rate of plot sharing, we estimate that as of June 15, 2016, **HCG was directly serving at least 197 households at its community gardens.** As will be shown in the following sections, **the total number of people served is much greater, since many gardeners share their produce with friends and Helena Food Share** (see Helena Food Share Provision section).

Among all respondents, the average age was 53 years old, ranging from 24 to 86, and the gardeners represented a mostly white, educated, aging, and well-off population. Twenty-nine percent of HCG gardeners are over 64, compared to only 19% of all Helena residents in that age range. Interestingly, 25-44 year-olds are over-represented among gardeners compared to the city of Helena; that is, HCG attracts a relatively young demographic as well as an older one. The proportion of gardeners ages 45-64 matches the Helena adult population - 39%. While we cannot reach a conclusion based on this data, it is possible that the average older age of gardeners compared to Helena's population reflects a greater amount of free time available to people who are retired or who are not working full-time jobs and raising young children.

Of respondents who answered the question about race, 93% report their race as white, the same percentage found by the most recent census. This suggests that **racial diversity among Helena gardeners is equal to that of the broader Helena population.**

The average proportion of college educated gardeners is 47%, compared to the Helena average of 45%. This suggests HCG's gardeners are, on average, slightly more educated than the broader Helena population.

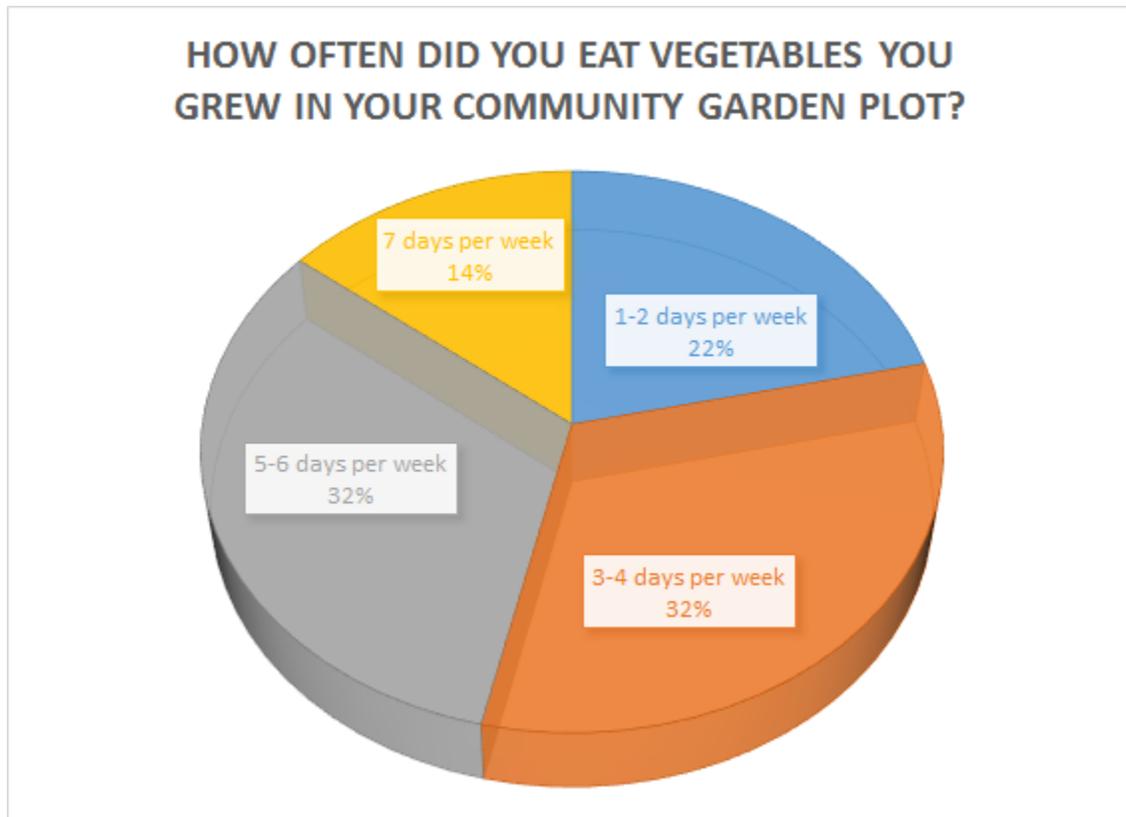
The median household income in Helena is \$50,311, meaning half of all households fall above that income level. Of the gardeners who answered our income question (n=92) on the survey, 61% have a household income over \$50,000 (compared to just 50% in the Helena population). On the other hand, 8% are very low income, in households earning less than \$15,000 (n=7), and another fourteen percent (n=13) are in households earning between \$15,000 and \$25,000. A closer look at the very-low income respondents shows that two are unemployed, single parents with health issues, two are senior citizens who live alone, and another is seasonally unemployed. They all participated in volunteer opportunities in their gardens and took advantage of HCG-sponsored events. Four were returning gardeners, two new. Interestingly, only one mentioned cost of plots as a challenge.

Despite high average incomes, **one-fifth (n=21) of the gardeners report that they were on a form of social assistance** (e.g. Unemployment Insurance). Eleven responding gardeners have a **disability**, and nine respondents are on some form of disability assistance. This demonstrates that **HCG is serving gardeners from a broad range of income and ability levels. However, to ensure HCG is welcoming and supportive of gardeners of all income levels, HCG may need to think about the unique needs of lower-income gardeners in both its outreach and on-going support of gardeners through provision**

of tools, seeds, and other types of assistance. Similarly, HCG should continue to make sure its gardens are accessible to people who use wheelchairs and to provide raised beds plots.

Of the 86 gardeners who came to HCG with some gardening experience (81% of respondents), over half had gardened on their own in private gardens. Since 19% of respondents reported they had not grown their own vegetables before participating in a community garden, it is clear that **HCG is reaching some completely inexperienced gardeners, providing a place for entry into the world of gardening where newcomers can learn from seasoned gardeners** (also see Sense of Community section).

Figure 1: Frequency of Garden-Grown Vegetable Consumption (by Percentage of Respondents)



The majority (71%) of respondents were women. While it is possible that women are more likely to garden, it could also be that more women were willing to fill out surveys than men (see the Study Limitations section). About a quarter of all gardeners live alone, with women slightly more likely to live alone than men. However, since there are more women respondents overall, **there is a large proportion of single, female gardeners.** The most common household size - 51 percent of all gardening households - is two adults, and the average household size in the entire sample is 2.2 people. Most households contain no children under 18 (80%), but of the households with children, the median number of children is two.

Male respondents were more likely to report that they received disability support (SSDI) and unemployment insurance payments. This suggests a somewhat greater need among male gardeners for social assistance, although men and women are similar in virtually all other respects (e.g. education, income, household size and composition, having a disability, whether they are a new or returning gardener, are sharing a plot, how many plots they garden, who they share food with, how often they eat from their garden in a typical week, and receipt of other forms of social assistance).

Access to gardening space was a primary motivator for respondents. When asked “What made you want to garden with Helena Community Gardens?”, 42% (n=44) of respondents commented that they were motivated by having access to gardening space. Many of these comments indicated that the gardeners had no other space in which to garden. For example, one gardener wrote, “We live in an apartment, so gardening is not possible there. This gives us a chance to garden.” Another sub-set of gardeners wrote that they needed more space (n=9) than their home lots could provide, while others preferred community garden space because it was sunnier than their home lots, or they were drawn by having a fenced, deer-free garden area. Gardeners were also drawn by the accessibility and proximity of community gardens (n=12). **Ultimately, 57% of respondents (n=61) claimed they would not be gardening at all if HCG was not providing gardening space.**

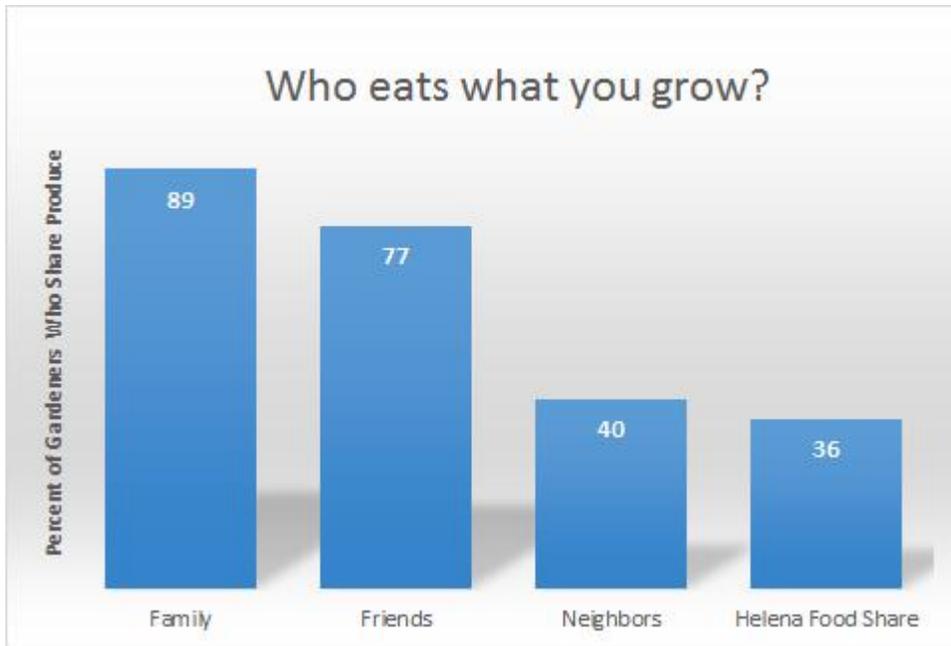
Gardeners want access to healthy, affordable food. In their comments, **28% (n=30) of gardeners indicated they were motivated by the ability and pleasure of growing their own food and/or having access to healthy, organic, local produce.** One wrote they were motivated by “a chance to grow things and know more people in the community.” And another: “It feels nurturing to grow food and eat it knowing *exactly* where it came from.”

In 2015, **79% of gardeners ate the food they had grown in a community garden three or more days per week during the growing season** (see Figure 1). Fifteen respondents (14%) grew foods that were culturally important to them. Some gardeners (5% of respondents, n=5) were also motivated by the cost savings afforded by gardening.

Overall, **returning gardeners are highly focused on growing food, and they are proud of the challenges they overcame or the new skills they acquired in doing so.** Forty-eight out of the sixty-four returning gardeners wrote a response to the question: “What was your greatest gardening accomplishment last year?” Sixty percent answered with the name of one or more specific vegetables: “ferocious tomatoes”, “glorious pumpkins!!!”, “Kale!”. Tomatoes were mentioned the most, but green beans, corn, potatoes, kale, and tomatillos all received multiple mentions. Various specific gardening techniques were cited by five gardeners as their greatest gardening accomplishment of the year, including netting tomatoes, seed starting, and using compost. Three referenced various irrigation successes, including one who thanked St. Paul’s for assisting with their irrigation system. Two mentioned pests (“killing a few mice!”) and two, controlling weeds. Four out of the 48 mentioned preserving food as their greatest accomplishment. Two preserved kale, one made pickles, and another green beans. Two wrote about overcoming hardships: one wrote “making it with limited help” and another that they started late and were

happy to just get “a lot of green beans.” **Even in the face of adversity, whether their own inexperience or voles or tomato pests, gardeners’ sense of accomplishment shine through.**

Figure 2: Recipients of Community Gardeners’ Vegetables



CONSTRAINTS AND CONCERNS ABOUT ACCESSING A COMMUNITY GARDEN

Financially disadvantaged individuals may face challenges to food growing that the average gardener does not. Lower incomes and a higher dependence on assistance programs were inversely related to the amount of garden-grown food people consumed per week; of the 9 returning gardeners who received a form of public assistance, 6 reported eating from their gardens 1-2 times a week, 2 reported 3-4 days a week, and 1 did not respond. None reported eating from their garden more than four times a week, whereas of those gardeners not on any form of assistance, over half regularly ate from their gardens five or more days a week. While the number of returning gardeners on public assistance is small, it is a troubling trend. Confirming this finding is the positive correlation between household income and the frequency of eating food from one’s garden ($R = .388$), meaning **the more income in a household, the more likely people are to eat the food they grow.**

One challenge may be gardening costs, as two gardeners expressed concern about the expense. Another challenge may be the time restrictions of working full time at low wage jobs, limiting the amount of time people can invest in growing their own food. While we can not come to any conclusions from this study about why financial challenges are correlated with less consumption of garden produce among HCG

gardeners, the links between working low-wage, full-time jobs and the need for social assistance, all while being time-strapped, is well established.¹⁴

We did find that perceived time limitations prevent many people from participating in community garden activities. When we asked returning gardeners, “What, if anything, would increase your ability to participate in your community garden activities?”, **48% (n=16) of respondents cited concerns about not having enough time to fit garden activities into their tight schedule.** Competing opportunities and obligations, whether from work, other hobbies, taking advantage of summer travel opportunities, spending weekends away, or not having enough free time overall, limit participation in gardening and garden events. **This suggests that requiring volunteer hours from gardeners could spark resistance, especially among people who have more work and family obligations.** In fact, several gardeners expressed concern about HCG’s volunteer requirements, as exemplified by this gardener’s statement: “For those that are far from the garden and work full time it is a large time commitment to work a garden plot, especially in summer when we are busy with outdoor activities and vacation. Weed seeds and flowers are a nuisance for everyone so it is a priority to remove them as well as tend vegetables/fruits. Requiring volunteering on top of gardening distracts from our own plots. I would rather spend that time keeping weeds from spreading to my neighbors than another project. Perhaps gardeners with more time should be rewarded for volunteering rather than distracting those that are working to upkeep their own plot. This could benefit everyone.”

Returning gardeners’ survey responses reveal a variety of other challenges that likely limit people from growing and consuming as much produce as they would like. Fifty-five out of the sixty-four returning gardeners we surveyed (86%) wrote a response to the question, “What was your greatest gardening challenge last year?” Gardeners with greater time and financial restrictions may find the following challenges more prohibitive than gardeners with fewer pre-existing constraints. By far the most common challenges returning gardeners faced last year were weeds (n=16) and pests (n=14). The pests mentioned included voles, mice, bunnies, aphids, potato blight and cabbage worm. Ten returning gardeners stated problems with specific vegetables that did poorly (squash, cucumbers, celery, radishes, tomatoes, and potatoes). The dry climate and the need to water were mentioned by six returning gardeners as their greatest challenge. Five described a problem with their plot – it sloped, it was full of weeds when they got it; another stated that their challenge was “making even more yield from small space” which could be taken to mean they found their space too small. Three returning gardeners wrote about difficulty managing their garden – everything was ready at once, or it was hard to manage by themselves, or finding the time to control weeds. Three returning gardeners cited health issues, one age-related. Two comments seem to reflect inexperience or lack of confidence: “getting the garden to grow” and “learning”. Lastly, only one person stated that “being away” was a challenge for them last year.

In summary, **it appears that the greatest challenges for returning gardeners are very much gardening challenges – weeds, pests, water and climate, with 46 comments related to these issues. In**

¹⁴ Ehrenreich, Barbara. 2001. *Nice and Dimed: On (Not) Getting By in America*. New York: Owl Books.

all likelihood, these same issues pose challenges to new gardeners as well. Smaller but important to note are returning gardeners' issues with time management, confidence, health, and other gardeners, types of problems that require interpersonal solutions and cooperation among gardeners.

Sense of Community¹⁵

Gardening with HCG enhances a sense of community among gardeners by fostering formal and informal learning opportunities, cooperative growing, and food sharing. Gardeners also extend the HCG community outward into the City of Helena by sharing food with friends, neighbors, and Food Share. People make new friends through participating in HCG. HCG expands community and knowledge by providing learning opportunities for new and experienced gardeners, and by opening their classes and programs to the Helena community at large.

Community was a primary motivation for people joining HCG. One-quarter of the gardeners (n=27) commented that they wanted to garden with HCG for the sense of community it offers, including the ability to garden with friends, to “know more people in the community”, and to “interact with other gardeners”. Similarly, “fun” was among the self-generated list of motivations. Not surprisingly, then, many people gardened cooperatively. **Almost one-third of the gardeners** (n=30, or 28% of respondents) **reported sharing a plot with someone outside their household.** People who live alone were the most likely to share a plot, with 13 out of 29 people who live with no other adult sharing a plot. Sharing food was even more common, illustrating HCG's positive impact in the broader community. **87% of returning gardeners shared food with people outside their own families** (n=53) (see Figure 2)

HCG builds community by inspiring gardeners to share knowledge and to learn from one another. Formally, HCG offers scheduled garden demonstrations on how to compost, start plants from seeds, and extend the gardening season. **HCG actively fosters community connections through planned activities that are open to the whole community,** offering workshops and demonstrations oriented to enhancing gardening and food preservation skills, potluck dinners, and children's activities. **In 2015, HCG offered eleven community-wide events** (see list and descriptions of each event in the Appendix 2), each attended by 10 to 135 people.

Three of HCG's community-wide events were attended by 30% of surveyed returning gardeners: Grow Local (n=15), Saint Paul's Helena Community Gardens benefit dinner (n=17), and a composting demonstration (n=16)¹⁶. These results suggest that **workshops with strong hands-on learning and social components are most appealing to gardeners.**

¹⁵ Vision Statements: 4. People of all ages know how to grow and harvest their own foods – and do! 6. A sense of community and common purpose is achieved; relationships within neighborhoods and gardeners are enhanced.

¹⁶ Note that our survey included only ten of the events, as our survey did not include the canning class that was offered in September and attended by 20 - 25 people.

Informally, **gardeners share ideas and growing advice with one another**, as 58% (n=37) of gardeners reported providing suggestions to another gardener, and 78% (n=49) reported hearing suggestions from another gardener. Eleven gardeners commented that the opportunity to learn from or mentor others motivated them to participate in HCG. For example, one gardener described participating in HCG as an “opportunity to garden alongside experienced gardeners” and another claimed to “love getting vegetables and learning valuable skills”. Knowledge-sharing takes place during routine gardening activities as well as during scheduled volunteer events at gardens. In 2015, 43% (n=27) of gardeners volunteered in their community garden. While it is clear that gardeners are sharing knowledge informally, **connecting more experienced gardeners to newer gardeners may be a way to further facilitate community and learning experiences.**

Formal and informal learning opportunities have brought results. When asked to describe what they have learned by gardening with HCG, most returning gardeners who responded to a question about learning mentioned learning a gardening technique like better watering (17% of respondents, n=7), or soil care (12% of respondents, n=5), protecting seedlings from wind, soil blocking, building garden beds, or using a timer to water. A big concern that many of the respondents appear to feel they have mastered is learning to grow food in Montana’s arid climate (20% of respondents, n=8). Notably, another type of response was specifically community-oriented. Seventeen percent (n=7) of responding returning gardeners commented about learning to get along with others, learning from others, **meeting new friends**, finding fellowship, and communicating better. Two people noted that they had learned to value local food.

To assist HCG with thinking about future programming, we asked both new and returning gardeners to write one thing they hoped to learn about gardening in 2016; 86 wrote a response. Twenty percent (n=17) said they wanted to learn how to grow a specific kind of vegetable (onions, corn, cucumbers, Great Northern White Bean, pumpkins, tomatoes, Fava beans, broccoli and cauliflower, squash, parsnips, cabbage, lima beans, and/or watermelon), while 17% (n=14) prioritized learning techniques for gardening in Helena’s climate. Other gardeners wanted to know how to improve soil quality (n=5), how to manage invasive plants or pests (n=5), how to manage or conserve water (n=4), or how to use other techniques (n=14) like permaculture, transplanting, crop rotation, garden planning, starting plants from seeds, and companion planting. **Interestingly, 6% (n=5) of gardeners wanted to learn how to garden with children or how to enhance children’s gardening experiences and knowledge.** HCG has many opportunities to increase its outreach and programming, with many gardeners receptive and excited about learning new techniques in community with others. Children’s programming is one such sought-after opportunity for expanding HCG’s outreach.

Helena Food Share Provision¹⁷

Helena Food Share and its clients clearly benefit from HCG's food production, in line with HCG's vision. In 2015, HCG contributed 300 pounds of fresh produce to Helena Food Share, as it had in 2014, and 95% of donated food was used by Helena Food Share clients. This community contribution is largely made possible by the **36% (n=22) of returning gardeners who shared their produce with Helena Food Share.**

The idea of growing food for others is highly motivating for many gardeners. One gardener claimed she wanted to garden with HCG because **"I love that HCG gives back to Helena Food Share"**. Another gardener claimed his greatest gardening accomplishment in 2015 was growing fresh produce for Helena Food Share. Yet another gardener wrote that **"We like the opportunity to garden. We like the mission of HCG. And we like being able to grow food for Helena Food Share"**. HCG's vision of sharing produce with Helena Food Share may even help recruit new gardeners, as indicated by this gardener's comment: **"Being new to the community, my [partner] and I are excited to get involved with community building projects like the community garden. We look forward to giving time to the garden, building relationships, and getting involved with Food Share."** This gardener's comment also illustrates the sense of community gardeners can derive from growing food for others.

On the receiving end, ten gardeners benefitted from the Food Share program. One of the strengths of HCG's program may be that **empowerment can come from being a producer as well as a consumer of social services.** These findings speak to the vital role HCG plays in empowering people to grow their own food, eat healthily, and both support and be supported as part of a community.

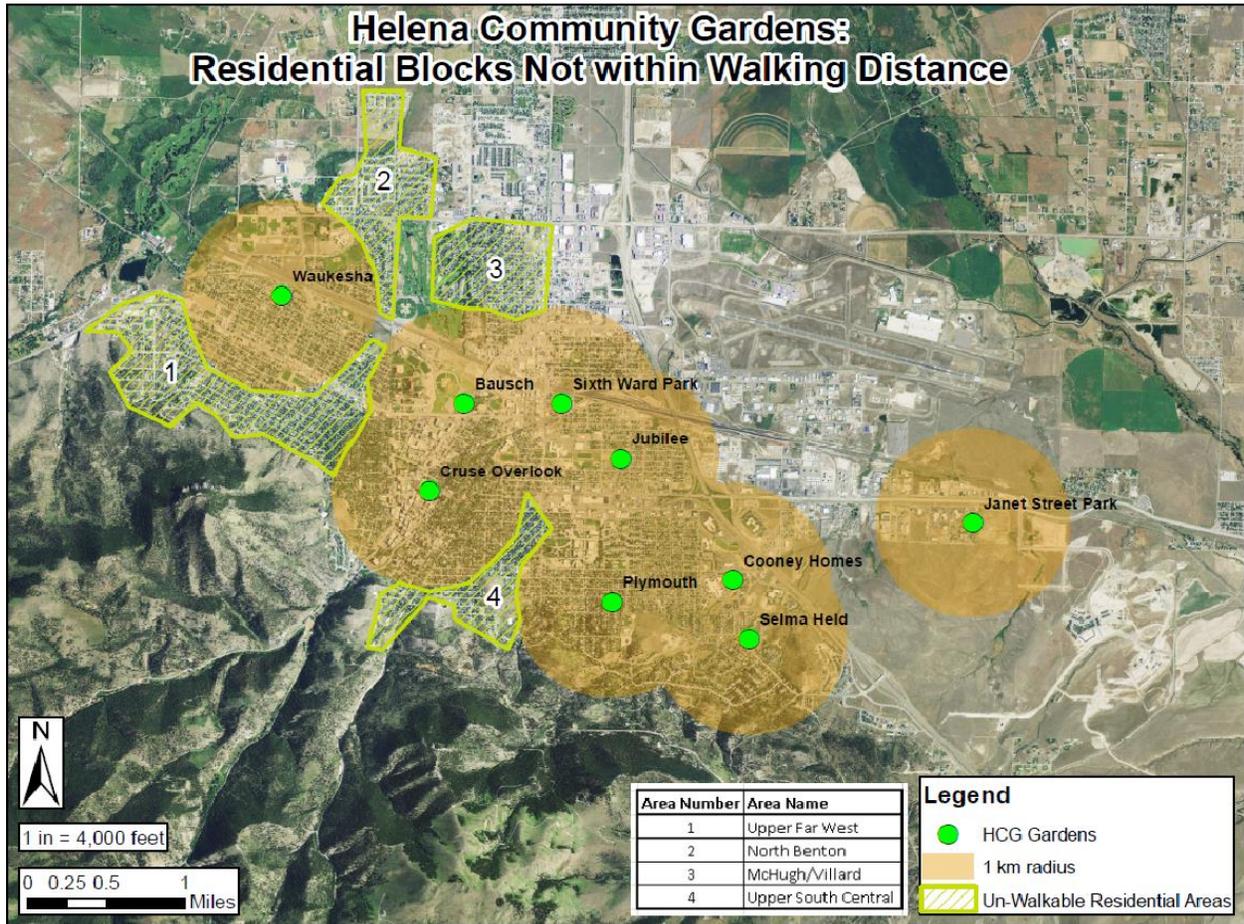
Environmental Sustainability¹⁸

Consistent with its vision, HCG provides environmental benefits by protecting open space, requiring organic growing practices, and reducing fossil fuel consumption in Helena's food production. As of June 15, 2016, HCG was providing **52,640 square feet of arable land** in its eight operating gardens, and protecting even more open space as walkways and common areas in each garden.

¹⁷ Vision Statement: Helena Food Share and their clients benefit from the production in our partner gardens.

¹⁸ Vision Statement: 7. The environment benefits through the open space gardens provide, organic practices, and the reduced fossil fuels necessary to access food.

Figure 3: Map of Helena Community Gardens Showing Walking Accessibility



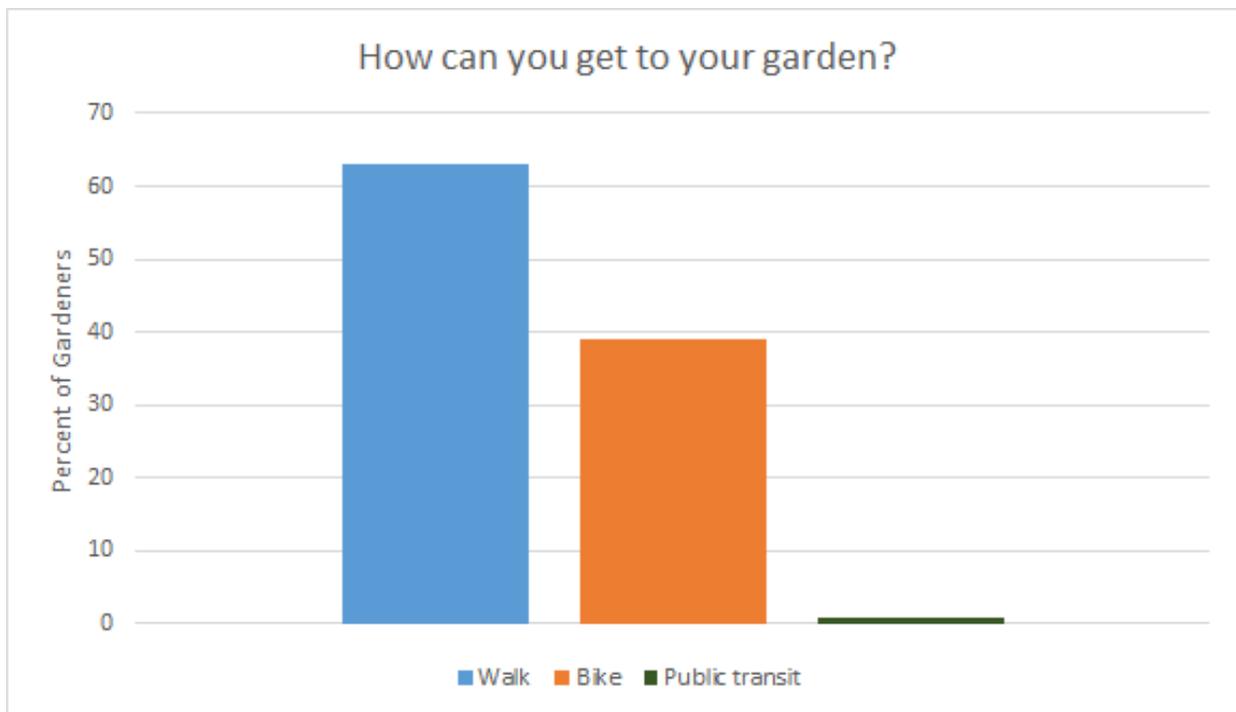
Map created by Erik Makus for HCG

HCG requires all gardeners to solely use organic growing methods, prohibiting synthetic pesticides, herbicides, and fertilizers in their gardens. Gardeners must also adhere to crop watering policies designed to conserve water. For example, gardeners may not use oscillating, overhead sprinklers unless they are being used in the gardener’s presence. By closely monitoring water usage and educating gardeners about water conservation techniques and tools like drip and soaker hoses, mulching, and routine weeding, garden managers help HCG to minimize water waste across gardens. **HCG might enhance its water conservation by offering more educational programming around soil enhancement and watering techniques**, and in so doing, it would simultaneously respond to gardeners’ expressed challenges and learning interests (see An Enhanced Sense of Community, above).

Conventional food production requires consuming fossil fuels to produce synthetic fertilizers and to transport food long distances. By prohibiting synthetic fertilizer use in its gardens, HCG cuts down on

fossil fuel consumption. **HCG also reduces the amount of fossil fuels needed to transport food from farm to table**, by providing over 197 gardening households with locally grown produce, and serving even more households through Helena Food Share. Instead of hauling food by truck from as far away as California and Mexico, many of HCG’s gardeners can physically carry their food home. Three-quarters (n=81) of gardeners claimed they can use sustainable transportation to commute to their garden plots (see Figure 4). **Gardens are within perceived walking distance for three out of every five gardeners (63% of respondents, n=68), and within perceived biking distance for two out of every five gardeners (39% of respondents, n=42).** The addition of Sixth Ward Park Garden in 2017 will add even more accessibility at the city level (see Figure 3 on page 15). While many of Helena’s residences are within a 1 km radius of a community garden, Figure 3, on page 15, shows that there are areas in Helena that are not yet walkable for gardeners, and these areas would likely benefit from having a community garden.

Figure 4: Perceived Ability to Use Sustainable Transportation between Home and Garden



In addition to adding more gardens within walking distance of residences, gardeners’ **public transportation use is an area for improvement.** Only one gardener indicated he or she could use public transportation get to their garden. The City of Helena is currently expanding its public transportation system, and HCG may want to consider educating gardeners about how public transportation services its gardens.

Clearly, **another factor that encourages driving is the transfer of supplies between home and the gardens,** since some gardeners who might otherwise walk or bike use cars to transfer materials between home and their garden plots. By providing community tools at gardens, HCG helps to minimize the need

to drive between home and garden. Keeping community tools in good repair and ensuring they are well-stocked might lower driving between home and garden.

Study Limitations

While we are very pleased with the level of participation and the findings of this first ever survey of HCG gardeners, we realize several limitations of the survey. We struggled to keep the survey short to increase participation and completion, limiting the amount of data we could collect. Even with this effort there were some gardeners who stopped responding mid-way through the survey. We cannot do any comparisons of different gardens, as it was agreed that identifying specific gardens could compromise confidentiality. We realized part-way through data collection that women seemed more likely to complete the survey when there was a couple renting a plot together. We tried to correct for that by randomly selecting one partner in a couple to respond, but in spite of this we believe women are overrepresented in our sample relative to the actual gender breakdown of gardeners. The response rate was influenced by the manner in which sign-ups occurred; Janet Street had a low response rate due to the fact that there was not an organized event for signing up in 2016.

Accomplishments and Recommendations for Addressing Challenges

People love being able to grow their own food, and HCG is already providing space and support for the Helena community. Through HCG, opportunities abound for learning about gardening within a supportive community, all while growing and harvesting local, organic food and promoting environmental sustainability. Even on paper, gardeners' enthusiasm and excitement about what they were able to do in their gardens leapt off the page in quotes like, "Thank you for providing this service to Helena! This is my hometown and growing up here I don't believe anything like this was available".

Most of the challenges gardeners listed would be unsurprising to people with agricultural experience: weeds, pests, and climate-related challenges. Tellingly, the list of gardener accomplishments closely mirrored that of the challenges, suggesting that, when gardeners are supported by local experts and neighbors, they can overcome challenges in a way that breeds confidence and inspires community.

In the next sub-section, we provide specific recommendations for addressing challenges that HCG faces. We also offer a few ideas for enhancing HCG's programs. We are confident HCG will continue to make progress towards fulfilling its mission and vision, and that it will persist in serving and inspiring Helena community members.

Recommendations Addressing Challenges and Suggestions for Future Programming

BROADEN RECRUITMENT EFFORTS

To provide everyone in Helena with access to healthy, affordable, and fresh food, and to ensure people of all ages know how to grow and harvest their own foods, and do so, HCG will need to broaden their recruitment efforts to ensure that all sectors of the community are aware of what HCG offers. HCG's most effective recruitment strategies rely on social networks and community engagement. This means it should continue providing excellent service for current gardeners and encourage them to invite friends and neighbors to join HCG. HCG will also need to expand outside its existing social circle. One way to do so is to host more events, like Grow Local and St. Paul's benefit dinner, that provide a basis for people from across organizations to mingle. Churches are clearly a strong ally for HCG, with many more faith communities in Helena that could be reached, and there may be ways to get the word about HCG out through other community organizations. Since many gardeners report learning about HCG by passing a garden, good signage is crucial, including information on how to contact the organization.

In its recruitment efforts, HCG may want to consider its representation in the broader City of Helena. It could help balance its age and socio-economic representation by focusing on recruiting people from lower income brackets, who are younger, people who have no experience gardening, and people with less education. Recruiting at Helena Food Share through posters and flyers might help include more low-income gardeners. The same flyer could be provided to social service agencies for their clients, and to the YMCA. Some organizations such as the Florence Crittenton Home might be interested in a garden for their clients. However, creating events specifically for communities like Helena Food Share and Florence Crittenton would likely prove most effective, given the power of word-of-mouth in recruitment. Plus, if events are designed to demonstrate gardening and food preparation skills, the skills they imbue could make entry into a new world of gardening a little easier.

EXPAND AND ENHANCE EDUCATIONAL PROGRAMMING

Gardeners have benefitted from educational programming. They have also voiced a desire for more gardening knowledge and skills. Educational programs and events that focus on organic methods for managing weeds and pests, for gardening in Helena's arid climate, and for improving soil quality (composting demonstrations were a clear favorite), and water conservation would be well received and would support HCG's mission and vision.

We suggest continuing existing programs and offering more of them. It is notable that some of the 2015 events were attended by less than 20 people. While this may be ideal for some classes with hands-on activities, it could also be a missed opportunity to have more people learn gardening skills from a single event. We suggest enhancing marketing efforts and communication around event promotion, since there is evident interest in the types of education events being offered. We also suggest offering some of the

same classes on two or more dates and giving advance notice so people have more flexibility with working classes into their tight schedules.

Children's programming and events, like Growing Rainbows, could be increased so that HCG reaches future gardeners and responds to the existing segment of gardeners who aim to involve children in the joys of gardening.

The HCG website could be utilized to a greater extent to assist gardeners with specific issues by including links to resources; see the Buffalo, New York website for Grassroots Gardens, with extensive resources (link in footnote).¹⁹

BUILD NEW GARDENS

Not all neighborhoods are within walking distance of a community garden, so we suggest exploring ways to build gardens in areas without access. Adding more gardens may also serve to protect open space in Helena and provide environmental benefits. Given that HCG's most recent garden, Jubilee, was initiated and implemented by a faith community, HCG may want to build partnerships with other faith communities in Helena and pursue building gardens that way. Similarly, building partnerships with other types of community-oriented organizations like schools and retirement communities, may prove fruitful.

COMMUNICATE MISSION AND VISION WITH GARDENERS

We suggest HCG might invest in a) communicating its mission and vision routinely to all gardeners; and b) educating gardeners specifically about what they can do to help HCG accomplish its vision and mission. Many gardeners are already interested in some or all of HCG's mission and vision, and they are already invested in the organization. Clearly communicating what HCG hopes to accomplish can help keep HCG's goals in the forefront of gardeners' minds and potentially gain more buy-in to HCG's goals and programs. One way to do this could be through garden signage, ensuring that HCG's mission and vision is visible at every garden entrance. Another way could be through verbally highlighting HCG's mission and vision at every meeting, event, and workshop.

A more specific example of how communication mission and vision could influence gardener behavior relates to environmental sustainability. Many gardeners indicated that they could bike and/or walk to their garden, but that does not necessarily mean they do so as much as they could. We suggest that HCG a) communicate its vision for the environment; and b) encourage people to walk and use their bikes when going to the gardens, and also to use public transportation. It is likely that many gardeners are not aware of the public transportation options, especially given the recent expansion of public transit in Helena. HCG can encourage people to use public transportation and educate gardeners about route options for each garden, where applicable.

¹⁹ See the Grassroots Gardens, Buffalo, NY, website of resources, including downloadable documents on composting, soil, building raised beds, common pests, watering and much, much more.
<http://www.grassrootsgardens.org/community-garden-resources.html>

MAINTAIN AND MONITOR GARDEN INFRASTRUCTURE, SOIL QUALITY, WEEDS, AND PESTS

The issues brought up by gardeners as both challenges and the sources of their greatest accomplishments are typical problems faced by Montana gardeners: pests, weeds, the arid climate and poor soil. These issues will always be with us. However, this survey establishes something of a baseline, from which HCG can measure progress.

Reducing the proportion of gardeners citing issues with voles or watering is a potential goal for a long-term strategic plan.

Providing tools at gardens helps reduce driving; however, tools require sheds, and not all gardens have them. Fundraising for sheds can focus on how sheds will increase access to gardens, especially for people with lower levels of income, and potentially reduce driving.

In addition, ensuring that every garden has plots that are accessible to people with physical disabilities will increase access.

ESTABLISH A MENTORSHIP PROGRAM

Since the majority of learning is already occurring from gardener-to-gardener, HCG could encourage gardener-to-gardener learning by setting up a mentorship program connecting novices to willing veterans at their own garden.

LEARN MORE ABOUT YOUR GARDENERS, HELENA FOOD SHARE RECIPIENTS, AND VOLUNTEERS

We suggest tracking the total number of gardeners, rather than just plot registrants. Since 28% of respondents indicated sharing a plot with someone outside their household, we can conclude that HCG is serving more people and households than suggested by registration data alone. We suggest including a question about extra-household plot sharing on future garden registration forms, as it would help HCG better recognize the total number of people it serves. It would also mean up to 28%

RECOMMENDATIONS FOR ONGOING MONITORING AND EVALUATION

HCG BOARD

Track event content and attendance at events. Record volunteer hours for board members, Garden Managers, and gardeners.

GARDEN MANAGERS

Track the number of new and returning gardeners at each garden, the number of plots rented, and renter arrangements for each plot/set of plots (i.e. the number of people and households sharing each plot). Continue to track pounds and types of food donated to Helena Food Share.

SURVEY

The survey used in this study can be adjusted for relatively easy distribution if HCG chooses to use it on an ongoing basis.

more people on HCG's mailing list and broader reach of donation requests.

We also suggest that HCG continue to collect basic demographic information about gardeners each year. Our study was unable to determine the number of women versus men gardeners, and this and other demographic information can help inform HCG programming, outreach, and fundraising efforts. We did not include sexual orientation in this study, but we suggest it be included in future surveys. Demographic information is increasingly required by sponsors and partners like United Way. Overall monitoring will also allow HCG to have a better sense of who it is serving over time, affording the organization a shorter time frame in which to adapt to changing circumstances.

HCG is reaching a lot of people through the 300 pounds of food it donates to Helena Food Share each year. Learning more about how many people benefit and their overall needs would assist in HCG's strategic planning.

Since HCG operates primarily from a strong base of volunteers, we suggest that it monitors volunteer hours and projects and that HCG uses information about volunteer hours in its communications with partners and potential sponsors.

SUPPORT STRESSED GARDENERS

A segment of HCG gardeners is very low income, and while we do not know where they garden, being aware and sensitive could help relieve some of the challenges they face. We do not know why they seem to grow less produce than higher income gardeners. Providing seeds, seedlings, and tools would reduce the financial burden. Perhaps a way could be devised for low-income or otherwise struggling gardeners to contact the organization discretely for assistance. The mentoring program could assist as well.

While the gardens represent a low-cost option for access to fresh vegetables, more recognition of the time demands of gardening in HCG's programming may allow for more participation from gardeners. Rather than requiring volunteer work from gardeners, HCG could solicit garden volunteers from the broader community and reward them with vegetables from the donation plot. Another option is HCG could consider the concept of a volunteer time banking system, whereby some gardeners could donate their volunteer hours to time-stressed gardeners who cannot fit volunteering into their schedule. A workshop on gardening on a time budget may be helpful to a number of gardeners, as would a web-based guide. Recognition and acknowledgement that some gardeners have significantly more time demands than others, and spreading that culture of awareness within each garden, could go a long way to enhance cooperation.

Conclusion

Helena Community Gardeners enthusiastically meet the challenges of Montana's climate to grow vegetables and community. They are highly appreciative of the opportunity to garden with others, in sunny plots protected from deer. HCG makes it possible for many people to garden who otherwise could

not, as this gardener highlighted: “HCG provides people who don’t have access to garden space a wonderful opportunity to grow their own vegetables and see them from seed to vegetable”. Gardeners’ enthusiasm suggests HCG is providing a service that should continue and grow.

We found that HCG has been meeting its mission to “build gardens, provide the tools and knowledge to grow food, and increase access to healthy and affordable food”. It has also made strides toward accomplishing its seven vision statements, but there is room for growth. Many people are within walking distance of a community garden, but more neighborhoods can be served to make gardens accessible by all through walking. HCG serves a broad swathe of the Helena community, but it can enhance its accessibility, based on Helena’s demographics. HCG has provided many people in Helena with access to healthy, affordable, fresh foods, but it needs to expand its outreach to provide access to everyone. HCG serves people of all ages, and it has provided food-growing skills and knowledge to many, yet more people can be served. Helena Food Share has clearly benefitted from HCG’s produce. HCG has promoted a sense of community, but there is room for improvement, especially among gardeners who have less time to participate in HCG activities and volunteerism. Finally, HCG is providing environmental benefits through open space, organic practices, and by reducing the need for fossil fuels in Helena food production. In conclusion, adapting and enhancing successful programs, collecting more data, and adding additional programs targeting unmet needs could help HCG become an even greater presence in the community, better able to achieve its mission and vision.

Appendix 2: Returning Gardener Survey

Dear Gardener,

The Helena Community Gardens' (HCG) board strives to meet HCG's mission to build gardens, provide tools and knowledge to grow food, and increase access to healthy and affordable food. We invite you to participate in a study designed to help us understand how well HCG is meeting its mission and the overall impact it is having on gardeners and the greater Helena community. As a small, non-profit organization, understanding who we are serving and how we can better meet our mission will likely increase our ability to acquire funds from donors and enhance our services to you.

This survey asks about your experiences with gardening, your thoughts about gardening, and the role growing vegetables has played and could play in your life. It will take approximately ten minutes to complete. Your participation in this survey is completely voluntary and you may stop at any time or skip any question you do not wish to answer. All your answers are anonymous and confidential, and we will only report summaries of findings. Please place your completed survey in the provided white envelope and seal it. After you have sealed your white envelope, please place it in the manila envelope that will be delivered to the researchers who will compile and summarize the responses from all participating gardeners. If you have any questions, please contact Pat Christian at HelenaCGsurvey@gmail.com or (716) 480-5418.

Sincerely,

The Board of Helena Community Gardens

SECTION 1:

1. Before 2016, have you ever gardened at one or more of Helena's community gardens: Bausch Park Garden, Cooney Homes Garden, Cruse Overlook Garden, Janet Street Park Garden, Plymouth Garden, Selma Held Park Garden, and/or Waukesha Park Garden? *(Please check only one box.)*
 - No
 - Yes..... IF YES, how many years have you gardened in one or more of the gardens listed above, not including 2016? *(total number of years)* _____

2. Would you garden if you did not have a plot through Helena Community Gardens? *(Please check only one box.)* Yes No

3. How many plots are you renting this year in a Helena community garden(s)? *(total number of rented plots)* _____

4. This year, are you sharing your plot(s) with any gardener(s) outside of your household? *(Please check only one box.)* Yes No

5. How did you first learn about community gardens in Helena? *(Please check only one box.)*
 - Passing by a community garden
 - Helena Community Gardens' website
 - Word of mouth
 - A gardening event hosted by Helena Community Gardens
 - Other: _____ *(please write)*

6. How can you get to your community garden this year? *(Please check all that apply.)*
 - Drive
 - Bike
 - Walk
 - Wheelchair
 - Public transportation

7. Did you grow your own vegetables before participating in a community garden? *(Please check either no or yes.)*
 - No
 - Yes..... IF YES, what was most valuable in helping you learn how to grow your own food? *(Please check only one box.)*
 - Experimentation at a private garden
 - Experimentation in a community garden setting
 - Internet/online resources
 - Speaking with another gardener(s)
 - Book on gardening
 - Gardening workshop

8. Do you have any concerns about gardening this year? *(Please check only one box.)*
- No
 - Yes..... IF YES, please describe one concern you have about gardening this year: *(Please write below.)*

9. What is one thing you hope to learn about gardening this year? *(Please write below.)*

10. What made you want to garden with Helena Community Gardens? *(Please write below.)*

SECTION 2:

11. In which of the following activities did you participate in your community garden in 2015? *(Please check all that apply.)*

- Providing gardening suggestions to another gardener
- Hearing gardening suggestions from another gardener
- Scheduled garden demonstration (a “how to” presentation)
- Potluck
- Scheduled work or volunteer activity day
- Scheduled children’s activity
- Volunteering on a specific project/activity (other than during scheduled work/volunteer day)
- Other: _____
- None of the above

12. What, if anything, would increase your ability to participate in your community garden activities? *(Please write below.)*

Survey continues on the next page.

13a. In which of the following activities sponsored by Helena Community Gardens did you participate in 2015? *(Please check all that apply.)*

- A. Lentil Underground reading with author Liz Carlisle
- B. Soil Blocking and Seed Starting
- C. Saint Paul's Helena Community Gardens benefit dinner
- D. Grow Local
- E. Composting demonstration
- F. Growing Rainbows farm tour
- G. Lacto-fermentation
- H. Growing for Newbies
- I. Season Extension
- J. Harvest Celebration & Hootenanny

13b. From the above list, please choose the activity that was most helpful. *(Please write in the letter of the activity.):* _____

13c. Please explain why this activity or this activity was most helpful to you: *(Please write below.)*

14. By gardening with Helena Community Gardens, I have learned how to... *(Please write below.)*

15. Do you grow things that are culturally important to you that you can't get elsewhere? *(Please check only one box.)* Yes No

16. Who eats what you grow during the growing season? *(Please check all that apply.)*

- Yourself
- Family
- Friends
- Neighbors
- Fellow community gardeners
- Helena Food Share recipients

17. In an average week during the growing season, how often did you eat vegetables you grew in your community garden plot? *(Please check only one box.)*

- Never
- 1-2 days per week
- 3-4 days per week
- 5-6 days per week
- 7 days per week

18. What was your greatest gardening accomplishment last year? *(Please write below.)*

19. What was your greatest gardening challenge last year? *(Please write below.)*

SECTION 3:

20. What is your gender? *(Please check only one box.)* Male Female Other

21. In what year were you born? _____ *(year)*

22. What is the highest grade of school you have completed? *(Please check only one box.)*

- Grade school High school graduate/GED equivalent Some college
 College graduate Post graduate Prefer not to answer

23. Including yourself, how many people ages eighteen and over live in your household?
_____ *(number of adults)*

24. How many people under the age of eighteen live in your household? _____ *(number of children)*

25. Please specify your ethnicity *(Please check all that apply.)*

- Hispanic or Latino
 Black or African American
 Native American or American Indian
 Asian/Pacific Islander
 White
 Other
 Prefer not to answer

26. Do you have a disability? *(Please check only one box.)* Yes No Prefer not to answer

Survey continues on the next page.

Appendix 2: Helena Community Gardens' Community-Wide Events in 2015

The information included in this chart was provided by HCG board members and community members who led and/or participated in the events. Some of the event descriptions are word-for-word from these individuals.

Event	Date	Purpose	Key Accomplishments	Estimated number of People Attending
Lentil Underground	February 2015	To have a discussion about the book, <i>Lentil Underground</i> , by author Liz Carlisle, with people who were interested in organic agriculture and then tie that support into raising awareness of the HCG mission. The book focused AERO and Timeless Seeds' efforts to foster sustainable agricultural practices in Montana. Jim Barngrover, and HCG founder and board member, is featured in the book.	Raised \$70, added people to HCG's mailing list, and make everyone feel pretty good about sustainable agriculture. It was also an event that began to re-cement HCG's relationship with AERO.	130
Soil Blocking and Seed Starting	April 2015	To demonstrate a plastic-free method of starting seedlings and to train participants to make their own soil blocks. Also offered a seed exchange seeds.	Participants made their own seeded soil blocks. Community gardeners communicated and interacted with each other.	20
Season Extension	April 2015	To discuss and demonstrate some season extension techniques, so gardeners understand ways they can extend the growing season in spring and fall. To enable people to grow more produce.	Brent Sarchet, Lewis and Clark County Extension Agent, presented a variety of techniques for many levels of interest, experience, and cost. Participants were able to see all techniques in use at the Extension garden and take away specific information on how to implement them in their own gardens.	6 - 10

Event	Date	Purpose	Key Accomplishments	Estimated number of People Attending
St Paul's Benefit	April 2015	To partner with St. Paul's Methodist Church, which supports Cruse Overlook Garden, to expand local awareness of Helena Community Gardens and its mission, to promote HCG education/outreach efforts, to raise funds for HCG general mission, and to share delicious, locally based food with friends and supporters.	Hosted most popular Wednesday Night Dinner of the year, reaching overflow capacity. Shared key successes of Helena Community Gardens and promoted upcoming classes and events to a large audience. Answered at least 15 inquiries about available community garden plots and passed out contact information for signups. Responded to at least 20 general gardening/soil questions. Raised \$696 in donations.	135
Grow Local	May 2015	To kick-off the annual gardening season, to raise awareness about HCG and available plots, to socialize, to educate people about sustainable agriculture and community gardening, and to network with other organizations.	Had 5-6 tables from other organizations at the event. A panel of three speakers sharing examples of garden projects in the region: a school garden, a community garden in Great Falls, and gardening projects in Canada. Hosted a potluck and the Montana Women's Chorus.	60 - 80
Composting Demonstrations	Several dates in the 2015 growing season	To demonstrate effective composting techniques and to return organic material to the earth	Participants met at an active compost pile at Waukesha Park Garden and learned how to create and maintain a compost pile that has a high internal temperature. Participants helped turn the compost pile. Effectively returned organic materials to the earth and diverted them from the landfill.	<i>Unknown</i>
Growing Rainbows Farm Tour	September 2015	To give kids and families hands-on experience harvesting vegetables and interacting with farm animals. To teach children to appreciate and pay attention to the multitude of colors in the garden.	Received great feedback from participants. Kids enjoyed it, and they formed a rainbow from harvested veggies. Provided a garden potluck lunch.	35

Event	Date	Purpose	Key Accomplishments	Estimated number of People Attending
Canning Class	September 2015	To teach gardeners how to preserve their produce through the season and to share safe home food preservation practices.	Educated people about safe food preservation techniques. Partnered with Lewis and Clark County Extension and to shared HCG's mission.	20 - 25
Lactofermentation	October 2015	To show gardeners how to preserve their produce with a natural method that increases vitamin content and provides both prebiotics and probiotics.	Introduced people to lacto-fermentation and its classic recipes, such as sauerkraut, ginger carrots, other condiments, salad ingredients, and side dishes.	12
Growing for Newbies	<i>Unknown</i> 2015	<i>Unknown</i>	<i>Unknown</i>	<i>Unknown</i>
Harvest Celebration & Hootenanny	November 2015	To offer a multi-generational event to help grow community with home grown food and music and to raise funds for HCG.	Family dance music was provided by four professional musicians and twelve students ranging from elementary through high school. Everyone from octogenarians to babes in arms danced to jigs, reels, circle dances. A ukulele class in was offered in the afternoon prior to the dance and attended by approximately twelve people. A silent auction raised almost \$700. A delicious potluck was enjoyed by all.	60+