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Vermont Foodbank Needs Assessment:

An Investigation into the Needs of Community Partners in the Northwest Region of Vermont

Executive Summary

Graduate students at the University of Vermont collaborated with the Vermont Foodbank between May and October 2019 to conduct a needs assessment of 20 selected community partners (CPs) in Northwestern Vermont. The purpose of the assessment was to identify firmographics, levels of community engagement, and interest in foodbank initiatives among partner organizations. These findings have the potential to shape future plans of the foodbank and better meet the needs of CPs and their constituents.

The needs assessment covered several topics including organizational scale, types of food distributed and desired, barriers to increasing food distribution, community engagement, and interest in a regional distribution center. Data were collected via an online survey distributed to CPs by Andrea Solazzo, the agriculture and community outreach manager for the Burlington region of the Vermont Foodbank. Surveys were sent to 25 organizations, and 20 were received by the cutoff date of October 21, 2019, resulting in an 80% participation rate. The questionnaire consisted of 27 questions both qualitative and quantitative in nature, consisting of open-ended, multiple-answer, and multiple-choice questions.

Firmographics

While participation was limited to the northwest region of Vermont, CPs reported significant variation in size. Annual budgets spent on food range from \$0 to \$200,000, serving between 60 and 14,000 constituents. Furthermore, the number of full-time employees varied from 0 to 24, and volunteer participation ranged from 15 to 1,000 people. Lastly, the percentage of food provided by the Vermont Foodbank also varied significantly, from 5% to 100%.

Desirable Food Types

- Most CPs reported distributing fresh produce (80%), canned food, (80%), and dry food (75%), while fewer also distributed dairy (55%), and salvaged food from grocery stores (55%).
- When asked about whether they would be interested in receiving more fresh produce, 60% responded either “interested” or “very interested.” Of those respondents, over 90% were “very interested.”
- There was a disparity of interest in produce between small and large CPs. Only 44% of small CPs were interested in more produce, while 73% of large CPs expressed interest.
- Common vegetables such as apples, broccoli, carrots, and corn were overwhelmingly desired, while more uncommon vegetables like rutabaga and parsnips were less desirable.

Distribution Center

CPs expressed a clear interest in a distribution center with over 94% of the organizations saying they would make use of a foodbank distribution center in Chittenden County. Moreover, 85% said they would visit the center at least once a month.

Community Engagement

- Only four of the twenty organizations are currently interfacing with VT Fresh (30%), however twelve respondents (60%) expressed interest in engaging with the program.
- 70% of respondents attend at least one county-wide community meeting. Only one CP reported attendance at more than two meetings.
- All large CPs reported attendance at community meetings, but only 33% of small CPs attend the same meetings

Barriers to Access

- Transportation is by far the most commonly cited barrier (85%). Between 7 and 9 respondents (<50%) reported availability of food, fear of stigma, and lack of skills and knowledge to prepare foods as barriers to access.
- Only 10% of respondents attributed availability of culturally appropriate foods and access to kitchens as barriers. Access to tools was not a barrier for any respondent.
- While not all respondents expressed curiosity in engaging in anti-poverty initiatives, a majority (68%) were interested.
- A thematic analysis on the qualitative data revealed additional observations related to New American populations (including... [briefly define]). Not surprisingly, the language barrier was mentioned several times, making it difficult for New Americans to access services. In addition, respondents perceived lack of information, transportation, and fear of stigmatization as being noteworthy barriers to New Americans' access to foodbank services.
- Respondents reported a wide range of avenues via which their organization address the root causes of hunger, other than food distribution. Notable responses included educating constituents, leveraging communication networks with other organizations, and increasing access to additional resources like clothing and affordable housing.

Recommendations

- Perhaps most conclusively, survey results suggest a distribution center in Chittenden County would be exceedingly welcomed, and is a worthwhile consideration for the Vermont foodbank
- If the foodbank scaled-up produce distribution, larger CPs would likely welcome the increase in availability
- An increase in availability of non-perishable items would be preferable among smaller CPs
- Common produce (apples, broccoli, carrots, corn, green pepper, onions, potatoes, tomatoes, zucchini) might be more likely than more unusual products to increase utilization by CPs and their constituents
- Efforts to intensify participation with VT Fresh might target large organizations, as they reported strong interest despite already high enrollment rates
- The foodbank should consider reaching out to smaller CPs to understand why so few are not interested in the program
- The foodbank should consider partnering with or lobbying public agencies in coordination with CPs to increase accessibility of transportation
- Cultural influences in the form of social media campaigns and publicized events could destigmatize obtaining charitable food and reach more food insecure populations as a result

- Considering translation avenues for New Americans would prove beneficial, whether it be in the form of a devise or recruitment of volunteers who speak required languages for a given community

Conclusion

The Vermont Foodbank initiated this needs assessment of CPs in Northwestern Vermont to better recognize opportunities for improvement and gauge interest in plans under consideration by the foodbank. Despite some questions being outside the scope of the foodbank's organizational capacity today, our findings may influence projects and partnerships with the community in the future.

The survey revealed multiple actions the foodbank can take to better meet the needs of CPs and their constituents. Among them, a noticeable desire to implement a distribution center in Chittenden County, an interest in more fresh produce distribution, and the need to increase awareness of the VT Fresh program. Furthermore, there was a clear difference of perspectives between CPs depending on size, measured by enrollment of volunteers reported. It may be necessary for the foodbank to tailor their initiatives to better suit varying organizational capacity. While our findings can offer strong evidence that certain steps should be taken, additional discussions with CPs would conclusively identify priority initiatives moving forward.

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Background

Approximately 1 in 9 people and 1 in 7 children struggle with hunger in the United States (Feeding America.org). Vermonters are at even greater risk, with 1 in 8 people and 1 in 6 children experiencing hunger. People facing hunger in Vermont would need almost \$43 million more per year to put an end to their hunger. Feeding America is a nationwide 501(c)(3) nonprofit that plays a vital role in feeding the population of those who would otherwise be unable to afford enough food. The nonprofit maintains a nationwide network of locally managed organizations to distribute food and services to people struggling with hunger. The network consists of 200 food banks and 60,000 food pantries and meal programs, making up the largest domestic hunger-relief organization in the country. The Vermont Foodbank is one of the primary distributors of charitable food in Vermont under the Feeding America umbrella (VTfoodbank.org). The organization provides food to 215 food shelves, meal sites, senior centers and after-school programs. In addition, the Vermont Foodbank has several initiatives focusing on specific populations and increasing consumption of foods with higher nutritional content. For example, VeggieVanGo is a program that delivers fresh produce to schools and healthcare facilities in order to offer more nutritious food items to those unable to afford it. The Gleaning Program works with over 600 volunteers to harvest produce that would otherwise go to waste because of their irregularities. The program saves and distributes approximately 465,000 pounds of fresh, local produce every year.

In Chittenden County, Vermont, a 2014 survey conducted by the foodbank estimated that 15,100 residents visited a charitable food center (9.4% of the population) (bVTfoodbank.org) – however, our data seems to indicate this number has increased in terms of number of people served over time. As the Vermont Foodbank adds new initiatives in Chittenden County while building on current ones, they aim to examine the precise needs of CPs and their constituents to ensure current and future projects meet their intended purposes.

Methods

William Ball and Sam Bliss, two graduate students researching food distribution networks at the University of Vermont (UVM), collaborated with Andrea Solazzo and her colleagues at the Vermont Foodbank to conduct a needs assessment of CPs in Northwestern Vermont. Notes from previous organizational meetings were made available to the research team with the intention of familiarizing them with the priorities and projects that the foodbank are currently considering. Researchers met three times to draft a questionnaire and determine how the survey would be generated and distributed. It was then disseminated to other Vermont Foodbank employees who collaborated to finalize the draft. The approved questionnaire consisted of 27 questions both qualitative and quantitative in nature, consisting of open-ended, multiple-answer, and multiple-choice questions. It covered several topics including organizational scale, types of food distributed and desired, barriers to increasing food distribution, community engagement, and interest in a regional distribution center.

An Institutional Review Board (IRB) assessment found the research posed no risk to participants because the survey was designed to be taken anonymously by an employee or volunteer whose contact information was only known by the lead community partner. We leveraged REDCap software to generate and conduct the survey per IRB recommendations. Once the proposal was approved, the lead community partner sent an email to 25 CPs that included the consent form and a link to the survey. The survey was made available on September 13, 2019. Subsequent emails were sent to encourage CPs to complete the survey, with a cutoff date of October 22, 2019. By this date we received 20 surveys resulting in a response rate of 80%.

The researchers then exported the data to IBM SPSS Statistics for windows, Version 25.0 to clean and analyze the data. Each multiple choice and multiple answer question was analyzed using a frequency test to examine how many (and what percentage of) respondents answered in a certain way. To investigate whether responses were noticeably different between larger and smaller organizations, CPs were separated into two categories according to size, defined by the number of volunteers reported. We considered large organizations to be those which enlist more than 40 volunteers, and small organizations with equal to or less than 40. Table 1 shows which organizations were categorized as “small” and “large.” We used Microsoft Excel to generate relevant tables and figures that represent the data clearly. A thematic analysis for each short answer question was conducted by the researchers to determine themes across responses.

Table 1.
Classification for Small and Large Community Partner Sizes

Small CPs	Large CPs
Arrowhead Senior Center	Aunt Dot's Place
Essex Jericho Underhill Ecumenical Food Shelf	Charlotte Food Shelf Inc.
Malletts Bay Congregational Church	Colchester Community Food Shelf
Maquam Bay of Missisquoi, Inc.	Feeding Chittenden
Milton Family Community Center	Hinesburg Community Resource Center
NROC/Northgate Apartments	Intervale Center Gleaning and Food Rescue
Richmond Food Shelf	NorthWest Family Foods
The Janet S. Munt Family Room	Steps to End Domestic Violence
Winooski Food Shelf	The Salvation Army
	Vermont Youth Conservation Corps
	Williston Community Food Shelf

Findings

The data offered several conclusions across various topics covered in the survey. Questions present in the survey included firmographics, attitudes towards an increase in produce distribution, a new distribution center, barriers to accessing services, and perceptions of current services. The following will be an examination of the data collected accompanied by recommendations relevant to each category.

Firmographics

This project provided an opportunity for the Vermont foodbank to gather relevant information about the organizations they work with on a regular basis. We were interested in the general size of CPs and what portion of their organizational resources are used for food distribution. Our findings show that the CPs are operating at greatly varying sizes. Survey questions asked for the number of employees and volunteers enlisted by CPs along with how many constituents they serve. Additionally, we asked how much of their budget is allocated towards food alone. Unfortunately, some questions lacked specificity which made comparing organizations more challenging. For one question, “how much of the annual budget is spent on food,” more than half responded using percentages, while the remaining respondents with a dollar value. In addition, the number of people reported for employees, volunteers, and constituents served, did not have a temporal factor. This resulted in responses using numbers on a monthly basis, a yearly basis, or no time component at all. Nonetheless, further examination of Table 2 provides greater understanding of CPs and the constituents they serve.

Table 2
Firmographics of Community Partners

Organization	# employees	# of volunteers	Budget	Individuals Served
Arrowhead senior center	0		n/a	70-80 ⁺⁺⁺
Aunt Dot's Place	0	45	0.62%	415 ⁺⁺⁺
Charlotte Food Shelf Inc.	0	~43	67%	120
Colchester Community Food Shelf	0	45	75%	~214 ⁺⁺⁺
Essex Jericho Underhill Ecumenical Food Shelf	0	~30	0.86%	150 ⁺⁺⁺
Feeding Chittenden	15	1000 ⁺⁺⁺⁺	\$150-200k	14000
Hinesburg Community Resource Center	1	45	46%	392 ⁺⁺⁺⁺
Intervale Center Gleaning and Food Rescue	1	200	0	300
Malletts Bay Congregational church	0	12	100%	60-100
Maquam Bay of Missisquoi, Inc.	2	20	\$2,500	1761
Milton Family Community Center	24	25	>1%	1700
NorthWest Family Foods	2 ⁺⁺	~20 ⁺⁺⁺	\$24,000	1840 ⁺⁺⁺
NROC/Northgate Apartments	15	12	\$10,200	1,500 ⁺⁺⁺⁺
Richmond Food Shelf	2 [†]	15-20	~\$35,000	~ 65 ⁺⁺⁺⁺
Steps to End Domestic Violence	25	74	\$7,100	1868 ⁺⁺⁺⁺
The Janet S. Munt Family Room	13	40	\$10,000	800
The salvation army	5	40+ ⁺⁺⁺	0.05%	2800 ⁺⁺⁺
Vermont Youth Conservation Corps	65	1000	0.01%	2000
Williston Community Food Shelf	0	~80	90+%	800 ⁺⁺⁺
Winooski Food Shelf	0	27	~95%	700

Note: † indicates “part-time;” ++ indicates “full-time;” +++ indicates “per month;” ++++ indicates “per year;” +++++ indicates “families.”

The number of paid employees ranged from 0 (of which 8 respondents reported) to 65. CPs reported that at minimum 12 and as many as 1,000 volunteers regularly participate. Feeding Chittenden,

the Vermont Youth Conservation Corps, and the Salvation Army stood out as having substantially higher volunteer enrollment relative to other CPs. CP budgets for food varied considerably and were reported with either a percentage of the budget or the specific monetary budget. We observed responses from as low as .01% to 100%, and from \$2,500 to \$200,000.

CPs were also asked to report the percentage of food that is sourced by the Vermont Foodbank, and whether their contributions have increased, decreased, or remain unchanged. Table 3 shows the percentage of food that CPs receive from the foodbank. See Appendix D for a more detailed table including changes in foodbank contributions.

Table 3
Percent of Food Sourcing from the Vermont Foodbank

Organization	Percent from foodbank
Vermont Youth Conservation Corps	4%
Essex Jericho Underhill Ecumenical Food Shelf	10%
The Janet S. Munt Family Room	10%
Intervale Center Gleaning and Food Rescue	15%
Milton Family Community Center	20%
Steps to End Domestic Violence	25%
NROC/Northgate Apartments	30%
Richmond Food Shelf	30%
Williston Community Food Shelf	30%
Winooski Food Shelf	30%
Feeding Chittenden	40%
Hinesburg Community Resource Center	40%
NorthWest Family Foods	50%
Maquam Bay of Missisquoi, Inc.	60%
The Salvation Army	80%
Malletts Bay Congregational Church	95%
Arrowhead Senior Center	100%
Aunt Dot's Place	no response
Charlotte Food Shelf Inc.	no response
Colchester Community Food Shelf	no response

Of the 15 CPs that offered a definitive percentage, the average was 42.67%. The range of contributions by the foodbank was between 4% and 100%. There was no relationship between organizational size and percentage sourced from the foodbank.

Desirable Food Types

We asked what types of food CPs currently receive from the foodbank as well as levels of interest in receiving more produce. Most organizations supply fresh produce, canned food, and dry food, with just over half distributing salvage from grocery stores and dairy products. Table 4 shows the percentage of organizations that distribute each category.

Table 4*Types of Food Community Partners Distribute*

Variable	Percent
Fresh produce	80
Canned food	80
Dry food	75
Salvage from grocery stores	55
Dairy	55

Note: n=20.

While the number of CPs distributing fresh produce and canned food were equal when analyzing all responses, a greater percentage of small CPs distribute canned food (89%) while fewer offer fresh produce (67%). Conversely, a greater number of large CPs distribute produce (91%), and fewer distribute canned goods (73%). This may be apparent because distribution of fresh produce can require more labor and frequent inventory updates compared to items with a longer shelf life. CPs with higher numbers of volunteers can handle the required labor, while smaller ones may not have the capacity.

The foodbank might expand initiatives distributing fresh produce to CPs; thus it is important to investigate levels of interest in receiving more produce. Furthermore, understanding which produce items are most desirable will allow the foodbank to more accurately meet the needs of CPs. Twelve CPs (60%) expressed interest in increasing produce distribution, choosing the responses “very interested” (11) or “interested” (1). However, there was a disparity of interest between small and large CPs. Only 44% of small CPs were interested in more produce, while 73% of large CPs expressed interest. A list of the CPs interested can be found in Appendix B. Table 5 shows the level of interest for 20 food items distributed by the foodbank.

Table 5*Produce Items Community Partners are Interested in Receiving and Top 11 most Purchased Vegetables*

Produce Item	Percent Interested	Vegetable	Shoppers
Carrots	91.7	Potatoes	71%
Onions	91.7	Tomatoes	67%
Potato	91.7	Onions	67%
Apples	83.3	Carrots	60%
Broccoli	83.3	Broccoli	54%
Corn	83.3	Bell	
Green Pepper	83.3	peppers	54%
Tomatoes	83.3	Lettuce	53%
Zucchini	83.3	Cucumbers	51%
Winter-Butternut	75.0	Celery	48%
Sweet Potatoes	66.7	Salad mix	47%
		Corn	47%

Winter-Spaghetti	66.7
Beets	50.0
Cabbage-Green	50.0
Winter-Acorn	50.0
Cabbage-Red	33.3
Parsnip	33.3
Rutabaga	33.3
Turnips	33.3

n=12

Food items were sorted from the highest to lowest level of interest. Perhaps unsurprisingly, the items of greatest interest tend to be more common in the United States. All the items in green, with the exception of zucchini, are within the top 11 most purchased vegetables or fruit in the United States, shown in bold on the table to the right (Produce Marketing Association, 2018). The four items with the least interest (33.3%) were chosen by the same four CPs which selected every produce item offered on the survey. These organizations were Feeding Chittenden, Steps to End Domestic Violence, Intervale Center Gleaning and Food Rescue, and Hinesburg Community Resource Center. Furthermore, these four CPs made up 67% of respondents who engage in some level of county-wide community meetings, indicating there could be a relationship between community engagement and interest in less common types of produce. However, only two of the four indicated they were currently interfacing with VTFresh, while all four expressed a desire to increase engagement with the program.

Distribution Center

The foodbank was interested to know if establishing a distribution center in Chittenden County would be welcomed and used by CPs. Currently, many CPs in Northwestern Vermont drive roughly one hour to Barre, VT to obtain food from the foodbank and avoid the extra costs of delivery. Add in issues associated with variable weather in the winter months, and it is easy to see how CPs might benefit from a distribution center closer to their institutions. We posed two associated questions on the survey: “Would your organization utilize a foodbank distribution Center in Chittenden County?” and “How frequently would you use the distribution center?”

Recommendations

- CPs would likely welcome increased availability of produce if the foodbank could scale-up distribution, however smaller CPs likely prefer increased availability of canned and dry foods over produce
- Common produce (apples, broccoli, carrots, corn, green pepper, onions, potatoes, tomatoes, zucchini) should be prioritized over unusual products to increase utilization by CPs and their constituents
- There is a need to increase education about less common fruits and vegetables to encourage greater nutritional diversity while establishing a venue to reduce waste of more produce types

“We found that 94.4% of CPs said they would use a distribution center in Chittenden County.”

Upon examination of the first question, we found that 94.4% of CPs said they would use a distribution center in Chittenden County. All large CPs reported support for the center, and 85% of small CPs also showed support. The second question provided options for respondents to select how often they would use it. While the options were difficult to decipher due to ambiguity in the formulation of the question, it was evident that a large majority (88%) would use the distribution center more than once a month. These

findings offer a strong case that the establishment of a distribution center in Chittenden County would prove beneficial for CPs in the area.

Community Engagement

Recognizing the value that community networks can offer individuals and non-profits, it is

Recommendations

- The foodbank should consider establishing a distribution center in Chittenden County with the broad support of community partners
- Community partners should participate in the establishment of the distribution center to ensure location and size would meet their needs

imperative that we learn to what extent CPs are engaging with the greater community, and if so, what avenues they take to accomplish this. We asked whether or not CPs are engaging with VTFresh. VTFresh is a foodbank program that offers cooking demonstrations and taste tests with the goal of increasing access to, and education about, fresh fruits and vegetables. Today, 29 organizations leverage this resource and the foodbank would like to see enrollment increase. Most CPs (70%) are not interfacing with the program, but many would be interested in exploring the program more (63%). Appendix 3 identifies CPs interested.

We found a noticeable difference in responses when we separated answers between small and large CPs. Among the large CPs, 64% are using VTFresh with 73% interested in increasing involvement. This is a stark contrast to small CPs of which only 22% are involved, and only 44% expressed interest in increasing involvement.

Additionally, we asked participants which county-wide community functions CPs were attending. We offered a list in which respondents could check one or more answers. The meetings included were Hunger Council meetings; Homeless Coalition meetings; Refugee Health meetings; Community Dinners; City Council meetings; none; or other. Table 6 shows the frequency of responses for each option.

Table 6

Engagement with County-wide Community Meetings

Variable	Percent
Community Dinners	35
None	30
Hunger Council meetings	25
City Council meetings	20
Homeless Coalition meetings	15
Other	15
Refugee Health meetings	10

Note: n=20

Each function listed is attended by two or more organizations and up to 7 in the case of Community Dinners. Most CPs attend between 1 and 2 functions apart from Feeding Chittenden which reported attending all the functions listed. Three additional functions were listed as “other.” Intervale Center Gleaning and Food Rescue added UVM Food Security Council meetings, and The Janet S. Munt Family Room listed KidSafe- KidsNet and Children Exposed to Domestic and Sexual Violence.

Several CPs, however, do not attend any county-wide community meetings (30%). More notable is the gap between engagement of small and large organizations. All large CPs reported attending community meetings, but only 33% of small CPs attend the same meetings.

“More notable is the gap between engagement between small and large organizations. All large CPs reported attending community meetings, but only 33% of small CPs attend the same meetings.”

Recommendations

- Intensifying participation with VT Fresh should be prioritized towards large organizations, as they reported strong interest despite many already being involved in some way
- The foodbank should consider reaching out to smaller CPs to understand why so few are not interested in the program
- Contemplate designing a program more compatible to the needs of smaller CPs
- Smaller community partners should be encouraged to find methods of community engagement with the help of the foodbank
- The foodbank could encourage community partners currently unable to attend meetings by expressing the benefit of building community networks.

Barriers to Access

In addition to distributing food, the foodbank contributes to initiatives that address other barriers to adequate food access. Ensuring priorities between CPs and the foodbank are consistent will be valuable moving forward. We asked CPs to choose the three largest barriers for their constituents to access foods they want to eat. Figure 1 shows CP perceptions in order of least to most frequently chosen responses.

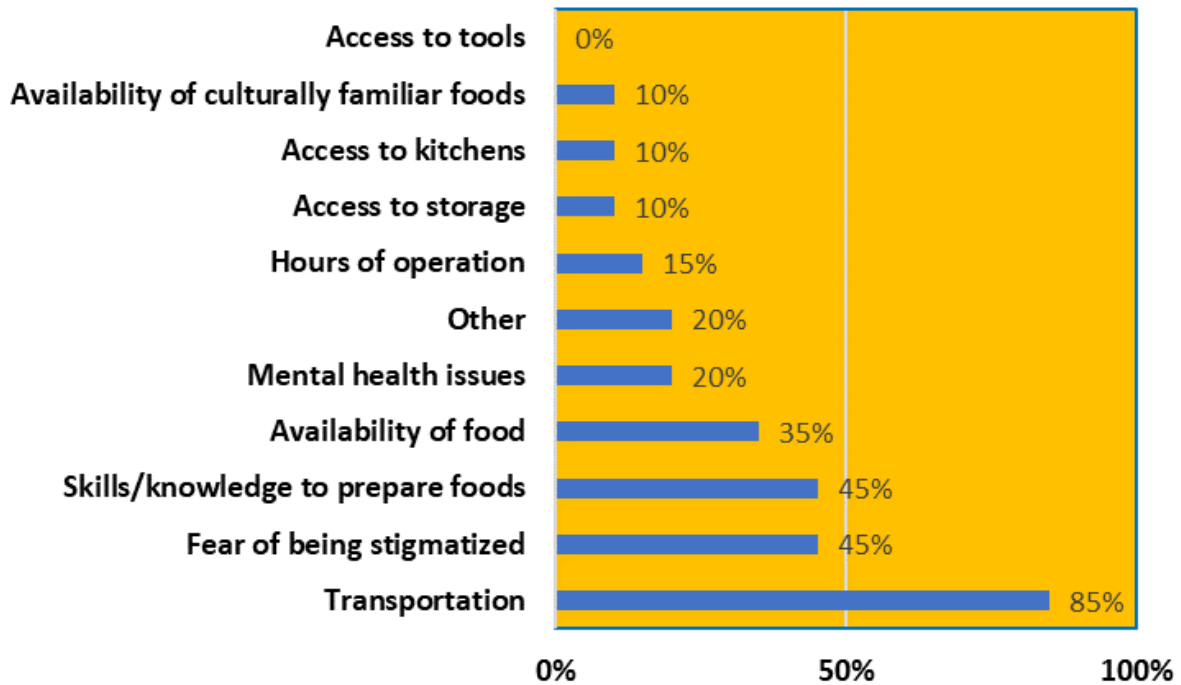


Figure 1. Bar Chart of the Perceived Largest Barriers to Food Access in Northwestern Vermont

Transportation stood out unquestionably as the largest barrier to food access among constituents, followed by fear of stigma, skills/knowledge to prepare food, and availability of food respectively. While the northwest region of Vermont does encompass the largest city in the state where resources are generally more accessible, living within the city can be unaffordable. As a result, many residents must rely on personal cars or public transportation to obtain access to essential resources. While fear of being stigmatized was identified by 45% of all respondents, only 22% of small CPs cited this concern. This may suggest that small CPs can be more effective at creating an inclusive culture, or it could be that large CPs are simply be more aware of these dynamics while small CPs do not have the capacity to pay close attention to these issues.

Another question on the survey focused on barriers that make it difficult for New American populations to access services. This was formatted as a short-answer question, requiring respondents to write in an answer at any length. We conducted a thematic analysis of the responses to determine common themes and topics mentioned across answers. We found that the most frequent comments mentioned language as one of the greatest barriers to New American populations, followed by culturally familiar foods, lack of awareness of resources, and transportation. One response explained the language barrier by pointing to the “lack of interpreters to make it easy and comfortable.”

Lastly, we asked how CPs address root causes of hunger other than by distributing food. This question required respondents to write in a response, and we conducted a thematic analysis as a result. We also asked whether CPs would be interested in increasing involvement in community anti-poverty initiatives – this was a “yes” or “no” question.

Educating constituents stood out as a common theme mentioned as another way CPs address the root causes of hunger. Whether it be by offering easy recipes, referrals to other resources (housing, health care, etc.), or educating through garden programs, CPs actively engage with constituents to increase their resilience to fighting hunger. One respondent summed up the common theme by stating that their organization addresses root causes of hunger by offering “advocacy [and] education in our community [,] with the population at large, cooperating with other entities trying to address hunger, offering food preparation materials [and] education to Food Shelf guests.” It is evident that many CPs go beyond the basic function of their organization as a distributor of free food. In addition, a majority of CPs (68%) showed interest in increasing involvement in community anti-poverty initiatives, with no significant differences between responses of small and large CPs. Therefore, while many CPs are already actively addressing the root causes of hunger, increasing promotion of these initiatives could have a positive impact and would likely be met with approval.

Recommendations

- Consider partnering with public agencies in coordination with CPs to increase accessibility of transportation
- Reach marginalized locations by establishing mobile food shelves
- Increase food drop locations focusing on areas that lack easy access to transportation and/or resources
- Cultural influence in the form of social media campaigns could destigmatize obtaining charitable food and reach more food insecure populations as a result
- Considering avenues of translation for New Americans would prove valuable, whether it be in the form of a multilingual tool or recruitment of volunteers who speak the dominant language(s) of a given community

Community Partner Perceptions of Services

We designed two questions to examine how respondents feel about the primary function of most CPs – the distribution of free food. Both questions were open-ended, and we conducted a thematic analysis to uncover themes.

The first question asked the following: “Assume there are enough resources to cover all operational and material needs. What do you think your organization and the Vermont Foodbank would need to do to completely remove food insecurity in the community you serve?” It was clear that many organizations would greatly expand services that are insufficiently provisioned by the public sector and are directly related to food insecurity. CPs would find ways to reduce the barrier of transportation and

increase awareness of their services in order to reach more people in need. Moreover, many respondents mentioned the need to make housing and healthcare more affordable, and to increase education surrounding food preparation and healthy diets. Increasing job opportunities and employment training was also repeatedly mentioned. CPs, more broadly, pointed to various ways they would lift the populations they serve out of poverty, which would theoretically eliminate food insecurity.

The second question asked, "In today's world, most food is exchanged by buying and selling. Your organization, by contrast, both gets and gives a lot of food for free or as a gift. For you and your organization, what are the benefits and/or drawbacks of receiving and distributing food for free?" There were only a small number of recurring themes because answers were not very consistent. They were both wide-ranging and at times contradicted each other. Discussing stigma, for example, there were responses that both described it as an advantage that their organization manages to distribute free food without any stigma (one calls it "food with dignity"), and there were also responses that described stigma as a possible drawback of free food distribution. Some benefits were gleaned by community development – forming trusting relationships and offering advice between employees/volunteers and constituents. The main benefit mentioned was that free food enables money-poor people (and families) to access food. One respondent mentioned that giving food away for free can "break down a financial barrier." Two responses explicitly described food as a human right, implying that lack of spending power should not prevent people from accessing enough nutrition. The drawbacks mentioned are more varied, but largely have to do with predictability, quality, consistency over time, and ability to get the types of food people really want. A dominant drawback was the issue of food spoilage – receiving food that is out of date or beyond peak freshness.

Discussion/Conclusion

The Vermont Foodbank initiated this needs assessment to better recognize opportunities for improvement, while gauging interest in possible initiatives under consideration by the Foodbank, and to better understand the needs and opinions of their CPs in Northwestern Vermont.

Our analysis of the data offered several conclusions about the needs of CPs. We also now have previously unspecified firmographic information of CPs in the northwest region of Vermont. A broad range of operational scale was represented and revealed differences in needs and opinions. There is a clear distinction between organizations with more volunteers versus those with fewer. The added people-power may allow large CPs to receive more produce with greater variety and engage with programs and initiatives that may not be directly related to the operational duties of the organization. Conversely, CPs with fewer volunteers indicated a lack of ability or interest in engaging with initiatives that are not directly associated with daily operations. This may be intuitive as organizations without enough support likely tend to focus on maintaining their space and executing the essential functions of their organization.

Most questions were formulated clearly and enabled our team to make decisive conclusions, but there were also a small number of questions that were not ideally worded. Questions in the firmographics section limited the conclusiveness of the size and budgeting of CPs because they were not specific enough. A time component of the questions regarding employees, volunteers, and people served was omitted. This resulted in answers with inconsistent temporal responses (per year, per month, etc.), while others did not specify at all. We could multiply answers that gave a per-month number by 12 to estimate a yearly total, but that would assume each month sees a new set of individuals participating, which most likely is not the case. The foodbank should pretest to identify

strengths and weaknesses for future surveys. This likely would prevent the inconsistencies of responses found here. Another limitation in the firmographics section was the lack of consistent responses to a question asking what portion of CP budgets are allocated towards food. By neglecting to specify whether respondents should answer with a percentage or monetary amount, answers were mixed. In future surveys this type of question should ask the respondent to answer in a predetermined unit value. Lastly, our findings are specific to the CPs surveyed and do not offer conclusive insights into other similar organizations in the state or country.

We can, however, make several conclusions from the data. First, CPs with lower volunteer enrollment often have different needs and interests than CPs with higher volunteer enrollment. Small CPs tend to stock items with longer shelf-lives, while larger CPs distribute more produce. Furthermore, larger CPs have the capacity to participate in community engagement initiatives at a much higher rate than small CPs. We also found there was a consensus on numerous topics. A large majority of CPs would welcome a new distribution center in Chittenden County, and transportation was overwhelmingly pointed to as a top barrier for Vermonters to access resources. Lastly, the most desirable produce items selected were also among the most common items purchased in the U.S. The Vermont Foodbank is considering several new projects, and we are certain of the importance to include stakeholders in the decision-making process. Our findings will inform the foodbank of CP needs and perceptions while shaping future initiatives.

References

Hunger in the United States (2019). Feeding America. Retrieved January 5, 2020, from

<https://www.feedingamerica.org/hunger-in-america/the-united-states>

Share Food (2020). VT Foodbank. Retrieved January 10, 2020, from <https://www.vtfoodbank.org/share-food>

Chittenden County (2020). Vermont Foodbank. Retrieved January 15, 2020, from

<https://www.vtfoodbank.org/2015/11/chittenden-county.html>

Top 20 Fruits and Vegetables Sold in the US (2018). Produce Marketing Association. Retrieved February 2, 2020. From <https://www.pma.com/content/articles/2017/05/top-20-fruits-and-vegetables-sold-in-the-us>

Appendix

A. Multiple Choice and Multiple Answer Response Frequencies

What types of food does your organization receive from the Foodbank? Check all that apply.

- 16_**Fresh produce
- 16_**Canned food
- 15_**Dry food
- 11_**Salvage from grocery stores

- 11_Dairy**
- 3_Other:**
 - At Costco twice monthly eggs, bread, butter, bananas, spam TP, paper towels, tissues, cleaning products.
 - Eggs, canned meals, beans, children's cereal, toiletries, deodorant, shampoo, soap
 - listed above we have one delivery a month. this one food drop works for us.

5. To what extent are you interested in receiving more produce?

- 11_Very interested**
- 1_Interested**
- 5_Neutral**
- 3_Uninterested**
- 0_Very uninterested**

6. What type of produce would you be interested in receiving? Check all that apply.

- 10_Apple**
- 6_Beets**
- 10_Broccoli**
- 6_Cabbage-Green**
- 4_Cabbage-Red**
- 11_Carrots**
- 10_Corn**
- 10_Green Pepper**
- 11_Onions**
- 4_Parsnip**
- 11_Potato**
- 4_Rutabaga**
- 8_Sweet Potatoes**
- 10_Tomatoes**
- 4_Turnip**
- 6_Winter-Acorn**
- 9_Winter-Butternut**
- 5_Winter-Delicata**
- 8_Winter-Spaghetti**
- 10_Zucchini**
- 3_Other:**
 - Anything available
 - Cucumbers, oranges, spinach
 - Fruits

7. Do you have enough existing resources (i.e. storage space, kitchen space, labor) to distribute more produce?

- 9_Yes
- 3_No

8. What are the barriers?

- 3_Lack of physical storage space on site
- 3_Labor to distribute produce
- 3_Labor to pick-up and unpack produce
- 3_Need for more cooler space
- 0_Food shelf customers are at capacity for produce
- 0_Other:____

10. Would your organization utilize a Foodbank distribution center in Chittenden County?

- 17_Yes
- 1_No

11. How frequently would you use the distribution hub?

- 3_More than once a week
- 3_Less than 5 times a week
- 9_More than once a month
- 2_Less than 5 times a month
- 0_More than once a year
- 0_Less than 5 times a year

12. VT Fresh offers cooking demonstrations and taste tests to visitors, and assists organizations interested in increasing capacity to stock fresh fruit and vegetables. Are you currently interfacing with VT Fresh? Check all that apply.

- 14_Not at all
- 4_Demos
- 3_Grants
- 1_Other Programs:
 - Provides baskets and containers to distribute food. I think this is the same program that will provide a fridge for us for storage

13. Is this something your organization would be interested in exploring more of?

- 12_Yes
- 7_No

14. What county-wide community meetings does your organization currently attend?

- 6_None
- 5_Hunger Council meetings
- 3_Homeless Coalition meetings
- 2_Refugee Health meetings
- 7_Community Dinners
- 4_City Council meetings
- 3_Other:
 - KidSafe- KidsNet Children Exposed to Domestic and Sexual Violence
 - UVM Food Security Council
 - n/a

15. Generally, what do you feel are the three largest barriers for the community to access foods they want to eat?

- 17_Transportation
- 3_Hours of operation for your organization
- 2_Access to storage
- 2_Access to kitchens
- 0_Access to tools
- 7_Availability of food
- 2_Availability of culturally familiar foods.
- 9_Fear of being stigmatized.
- 9_Skills/knowledge to prepare foods
- 4_Mental health issues
- 4_Other:
 - Affordability
 - comfort/taste for processed foods. Time to cook a meal
 - Lack of funds to buy food - living month to month, and when other expenses come up (car repair, heating, healthcare costs, etc) people eat inexpensive (often less nutritious) food or go without
 - we have a difficult time getting help. its always the same people. people want to be paid to help. all my people for the food drop are unpaid.

18. Do you think your organization would like to increase involvement in community anti-poverty initiatives?

- 13_Yes
- 6_No

B. CPs interested in receiving more produce

Organization
Aunt Dot's Place
Colchester Community Food Shelf
Feeding Chittenden
Hinesburg Community Resource Center
Intervale Center Gleaning and Food Rescue
Malletts Bay Congregational church
NROC/Northgate Apartments
Steps to End Domestic Violence
The Janet S. Munt Family Room
The Salvation Army
Vermont Youth Conservation Corps
Winooski Food Shelf

C. CPs interested in interfacing with VTFresh

Organization
Maquam Bay of Missisquoi, Inc.
NROC/Northgate Apartments
The Salvation Army
Hinesburg Community Resource Center
Winooski Food Shelf
Intervale Center Gleaning and Food Rescue
Steps to End Domestic Violence
Aunt Dot's Place
Vermont Youth Conservation Corps
NorthWest Family Foods
The Janet S. Munt Family Room
Feeding Chittenden

D. Food Source Percentages and Changes in Foodbank Contributions

Organization	Food sources	Change in FB contributions
Arrowhead senior center	100% FB (for food drop)	Increased
Aunt Dot's Place	VT Food bank; grocery store donations; home gardens; purchased from stores; donations & food drives.	Increased
Charlotte Food Shelf Inc.	Food bank, Salvation Farms, Costco, Hannaford, food drives.	No change

Colchester Community Food Shelf	VT Food Bank; two local grocery stores; church donations; food drives; community member donations of canned goods and fresh produce in the summer; local store purchases; Unsure of percentages, Food Bank is no doubt the largest.	Increased
Essex Jericho Underhill Ecumenical Food Shelf	10% FB 20% Purchased (fresh produce, eggs, and meat) 70% Fonations and local food drives.	No change
Feeding Chittenden	30% Tefap from USDA via Foodbank; 40% FB co op program; 30% Local supermarkets	Increased
Hinesburg Community Resource Center	40% FB 50% Purchased 10% Donated from elsewhere	No change
Intervale Center Gleaning and Food Rescue	For our gleaning and food rescue program, 15% of the food we distribute through our Fair Share Program come from gleaned Food Bank donations. The other 85% is from a handful of farms both on and off the Intervale.	Increased
Malletts Bay Congregational church	95% FB 5% Donated by congregation	No change
Maquam Bay of Missisquoi, Inc.	60% FB 30% Hannaford 10% Healthy Roots	Decreased
Milton Family Community Center	20% FB 25% Hannaford Milton 15% Madeleine's Bakery Milton 40% Community Donations	No change
NorthWest Family Foods	25% Grocery stores 25% Private donors 50% FB	No change
NROC/Northgate Apartments	30% FB 70% Costco	Decreased
Richmond Food Shelf	10% Public donations 60% Richmond Market 30% FB	Decreased
Steps to End Domestic Violence	50% Food gift cards (purchased by org.)	No change

	25% Donated food 25% Food shelves (including the FB)	
The Janet S. Munt Family Room	15% Donations 65% Costo/Hannafords 10% Garden 10% FB	Increased
The salvation army	80% FB 20% Private donors and volunteer groups who prepare meals and bring the food they serve to building	No change
Vermont Youth Conservation Corps	90% Produced on site 10% Gleaned/donated produce (of which <5% comes from food bank)	Decreased
Williston Community Food Shelf	40% donations from Essex Alliance Church 20% Donations from individuals and businesses 30% FB 10% Donations from local stores	Increased
Winooski Food Shelf	30% FB 5% St. Francis Xavier Church 65% Financial donations. Items are purchased from Shadow Cross Farm (eggs), Big Lots, Dollar Tree, and Walmart	Increased

Note: FB = Vermont Foodbank

E. Pounds Donated by Store, Fiscal Year 2019

Organization	Pounds
Trader Joes	141,758
Hannaford-Milton	110,448
Hannaford-Williston	103,115
Hannaford-Dorset St	98,390.75
Hannaford-Essex	98,016
Costco	91,240
Shaw's So. Burlington	67,357.50
Hannaford-Shelburne Rd	63,072
Market 32	44,813
Shaw's Williston	39,594
Hannaford-North Ave	39,498
Price Chopper-Hinesburg	34,589
Shaw's Colchester	19,588
Price Chopper-Essex	14,610
Healthy Living	14,192
Target	14,063
Frito Lay South Burlington	12,524
Price Chopper-Colchester	11,805
Panera Bread Co	6,246
Cumberland Farms-Riverside Ave	5,817
Cumberland Farms-Pine St.	4,196
Bimbo Bakeries USA	3,574
Cumberland Farms College Parkway	3,286
Walmart	1,748
Total	1,043,540