New Brunswick Community Food **Assessment**

Working Together for a Food Secure New Brunswick

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Preface

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Imagine walking into a poorly lit and cluttered attic. You're trying to find some boxes you carefully set aside over the past several years filled with kitchen utensils and plates that you now want to give to a relative. But your memory deceives you as you trip over accumulated containers and used pieces of furniture. Much to your consternation, that neat and tidy space you thought you knew so well grows murky and impenetrable. You discover things you forgot you had and fail to find the things you want. But rather than stomp out in frustration, you resolve to install brighter lights, make a proper inventory and diagram, and enlist your family members in a coordinated reordering of what has become a confusing and inefficient space.

Food systems are much like cluttered attics. Just when we thought we knew who has enough good food and who doesn't, new information emerges that alters our understanding of hunger and healthy eating. When we thought we had an accurate idea of the places where people get food, grow food, and learn about food, a new food pantry or farmers market opens, somewhere else a supermarket closes, or a new federal or state food program begins. As with those many boxes that different people have randomly shoved into that dark room, we've accumulated a dizzying assortment of food programs and activities. Some are operated by non-profit organizations, others by governments, and of course the for-profit world which grows, distributes, and sells most of our food. With flashlights to probe every dark corner of our food system attics, New Brunswick is fortunate to have a partner like Rutgers University that can help us understand what we have and don't have. They were aided by the Johnson & Johnson Foundation as well as many community organizations who participated in the assessment process.

When universities release a publication it's not uncommon to hear, "Oh, another report that will sit on the shelf and collect dust." Having participated in the research planning and final document review, I will say that dismissing this report's findings would be a terrible mistake. Take only a glancing look at the national numbers, and any thoughtful person should feel a sense of urgency. Food insecurity, poverty, and SNAP participation rates are considerably higher than they were at the century's start and remain stubbornly high today despite the Great Recession's end. New food pantries or special low-cost food sites continue to open, and as documented in a 2013 Feeding America report, 54% of the nation's food pantry guests now use food pantries as a regular (non-emergency) food source. And these are not just the poorest of the poor. Nearly one-third of all Americans live at less than 185 percent of the poverty level which qualifies them for many federal food assistance programs.

New Brunswick is a moderate size city that faces the same food challenges as the rest of the nation. The report tells the city's "food story" and describes the city's efforts to improve food security. While the authors muster an impressive array of data, they don't hesitate to dig beneath the numbers to carefully explain what is meant by food security and what causes food insecurity. It goes on to review the city's food and nutrition programs, its food retail environment, and the state of the community's food banks and food pantries. To round out the New Brunswick food system picture, the report also addresses community and backyard gardens, the growth of small food businesses, and efforts by local and federal agencies to expand nutrition and cooking education. The authors conclude with recommendations on how food and non-food related strategies can reduce food insecurity in New Brunswick.

One could fairly ask why the spotlight needs to be cast on New Brunswick's food challenges. Between the long list of public and private sector programs, wouldn't it be reasonable to assume that everyone's food needs are being met? This is a valid reaction, but it overlooks the fact that our nutritional

well-being is not merely dependent on the sum of numerous food outlets and projects. We in fact live in a "food system" which is a complicated and inter-connected set of activities and processes that extend from the seed and land to where and how we shop and eat. While we might think that handing someone a bag of food or signing them up for SNAP are all we must do, the dynamics of the food system are complicated and require that attention be paid to all the forces that have an impact on our ability to eat. With that end in mind, a food assessment identifies all the ways and places people get food, who is at risk for not having enough food, and the full array of food-related resources available within the food system.

The report makes it plain that we need to understand our food system – and mobilize our interventions – in the context of a specific place. Therefore, it's better to consider these problems, especially at a local level, from the point of view of a community's food security rather than as a problem of individual or household food security. Community food security – coincidentally, a term first defined in the 1990s by former Rutgers faculty member Michael Hamm – is "a situation in which all community residents obtain a safe, culturally acceptable, nutritionally adequate diet through a sustainable food system that maximizes community self-reliance and social justice." I might note that this is a definition of consequence because it places a significant measure of responsibility on the place itself for finding solutions, not solely on outside players like the federal government.

Of course, the big question is why does food insecurity exist, especially in the United States? Why does our food system function quite well for many and poorly for others? One thing we can't assume is that more, lower cost food is the answer. As the New Brunswick Food Assessment makes abundantly clear, there are a host of socio-economic and cultural factors that influence a household's ability to purchase food. High housing and health care costs, for instance, are inflexible expenses in a household's budget which often force families to make difficult choices about what they eat. We know that poverty is the greatest predictor of food insecurity which means that our efforts to remedy the problem must be mindful of its causes – high cost of basic necessities, limited employment opportunities, low wages, and inadequate income.

Another thing that this report makes apparent is that there is no lack of civic engagement in New Brunswick. There are a lot of people, organizations, and agencies who have rolled up their sleeves over the years to address the need. Yes, new programs can make a difference, and of course more money will always help. But perhaps the hardest and most beneficial action that a community's stakeholders can take is to collaborate. As one who has managed food system work in other cities, I know that trying to get everyone to work together is much like herding cats, but considerably less fun. I've come to conclude, however, that unless stakeholders share a vision for the future, identify common goals and measurements, and communicate with each other frequently, the odds of success are severely diminished.

Two people I admire most in the food system world are Amartya Sen, the Nobel Laureate economist, and Oliver De Schutter, the former Special Rapporteur to the United Nations on food security. Sen's research on global famine and political economies makes it clear that democratic participation and transparent decision are the most important deterrents to food insecurity. Likewise, De Schutter, drawing on his experience from across the globe, including the United States, has said that those who are regular actors in addressing food insecurity, e.g., food pantries, have the responsibility to report what they see to all those involved, particularly government. In other words, they must hold others accountable and not assume that they alone will fill the food gap.

All of this is to say that, going forward, New Brunswick must pay as much attention to its process for ending food insecurity as it does to the content of its programs and services. Success in bringing healthy and affordable food to everyone who calls the city home is just as dependent on the cohesion of the team as it on the performance of any one of its players. It should also be understood that there is a role for everyone,

not just for government or academic institutions or non-profit organizations. Experts and professionals must make room at the table for everyday people who also care about the future of their city.

New Brunswick's flagship food organization, Elijah's Promise, was established in 1989 with the motto that "Food Changes Lives." Like tens of thousands of other young people, I entered the food field with a similar belief, that food system work was a gateway to social change. Across the decades of my career nothing has occurred to dissuade me from that belief. If we understand how our food system functions, if we engage the people, the policy makers, and the programs, and if we commit to the hard but rewarding work of collaboration, the change we plan for will happen. Rutgers University and its partners have given New Brunswick a necessary blueprint for community food system change. The time has come to put it into action.

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Chapter 1. Working Together for a Food Secure New Brunswick

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Working Together for a Food Secure New Brunswick is a collaborative project of the New Brunswick Community Food Alliance (NBCFA), Johnson & Johnson, and Rutgers University. Project partners conducted a multi-year, three-phase food assessment and planning process to support efforts to improve community food security in New Brunswick, New Jersey.

The New Brunswick Community Food Alliance (NBCFA) launched in 2012 to improve community food security with a vision that "All City residents have access to adequate amounts of nutritious, safe, affordable, and culturally appropriate food at all times and in socially acceptable ways and enjoy the health and economic benefits of a strong local food system" (NBCFA Bylaws, 2012). The Alliance is the city's food policy council and it brings a variety of people together "to integrate aspects of the local food system (production, processing, distribution, access, consumption, recycling and waste management) to enhance the environmental, economic, social and nutritional well-being and health of the New Brunswick community" (NBCFA Bylaws, 2012). NBCFA operates through five work groups: Advocacy and Policy, Agriculture, Community Engagement, Food Economic Development, and Healthy Food Access and two partner organizations, the Feeding New Brunswick Network (FNBN) (a coalition of food pantries and community kitchens) and the New Brunswick Community Garden Coalition (CGC) (a coalition of people who work with the city's community and school gardens). It engages residents through an annual Food Forum community meeting and at regular bi-monthly meetings.

In Phase I of this project, the partners conducted a community food assessment to better understand the food security landscape in New Brunswick. NBCFA work groups incorporated food assessment findings into their work and drafted strategic priorities during Phase II. In Phase III, the partners transformed the priorities into a food plan and presented it to the NBCFA and other interested parties at a Community Food Security Round Table on October 2016 and at the NBCFA's Winter 2017 Food Forum (see Figure 1).

Figure 1. Project Timeline



Phase I. Food Assessment

The food assessment sought to describe the community food landscape and to understand who lacks food security and why. The research team held pre-planning discussions to better understand past and current projects, concerns, and thoughts for the future and to identify people to engage in the project. The research team held informal conversations during the 2015 summer with 16 people who work or live in New Brunswick and specialize in food security. Informed by the pre-planning work, the research team invited members of many community organizations and coalitions to participate in a Food Assessment Advisory Committee, which helped to plan the 2015-2016 food assessment. Members of the Committee and other community partners identified research priorities and questions, discussed methods, analyzed data, and discussed findings. The Advisory Committee helped to identify potential interviewees, contact those individuals or groups when needed, and engage people to attend meetings to hear and provide feedback on research findings. The Advisory Committee met bi-weekly in fall 2015, and slightly less frequently during spring of 2016 (see the Acknowledgements section for the list of Advisory Committee members).

Research Approach

We conducted the food assessment through a set of distinct yet interrelated research projects. We engaged people who work in New Brunswick as researchers and practitioners as well as undergraduate, masters and doctoral students in research and writing wherever possible. Three cohorts of Ralph Voorhees Public Service Fellows participated as did two graduate Community Development Studios. Collectively, we:

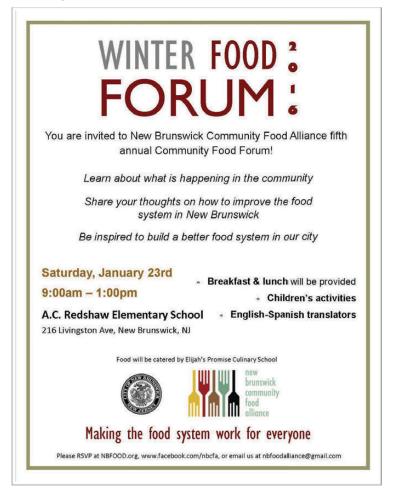
- reviewed literature about community food security, food assessments, the emergency food system, and work related to poverty and food security that had been conducted in New Brunswick;
- gathered, analyzed and mapped Census and American Community Survey data about housing, economic, and demographic characteristics to better understand New Brunswick;
- gathered administrative data about federal, state, and local food programs to understand their use in New Brunswick;
- conducted 16 interviews with food pantry directors and staff and two regional food bank directors, 59 interviews with community organizations and institutional staff, and 70 interviews with community residents (50 were conducted by staff at Elijah's Promise and Lazos America Unida) to 1) better understand who lacks food security and why, 2) identify the challenges food pantries face and opportunities to improve them, and 3) better understand food entrepreneurs and the challenges they face in creating new or expanding existing food businesses;
- identified and mapped food stores to better understand the food store landscape in New Brunswick; and
- conducted a survey of the commercial landscape in Unity Square and Georges Road neighborhoods to better understand the neighborhood food-shopping context.

Sharing Food Assessment Findings

The partners presented the projects to a variety of audiences. The team presented the research to the New Brunswick Community Food Assessment Advisory Committee periodically during the assessment and the synthesized assessment to them for feedback, interpretation and questions in June 2016. In July 2016, the partners presented the assessment findings to the NBCFA members and the New Brunswick community. The

research team also presented targeted pieces of the food assessment to individual workgroups throughout summer 2016.

Figure 2. 2016 Food Forum Flyer



Phase II. Community Food Round Table and Planning Process

The partners launched Phase II, the food planning phase, during the summer of 2016. After the research team presented the food assessment in June to the Food Advisory Committee, and in July to the broader New Brunswick community, team members discussed food assessment findings with each NBCFA work group and supported the work groups as they developed and drafted strategic priorities. After multiple meetings with each work group, and an extended drafting process, the NBCFA work groups plus the Feeding New Brunswick Network and Community Garden Coalition each presented strategic priorities at a Food Security Round Table community meeting in October 2016. With more than 60 attendees, including community residents, community organization leaders and staff from Rutgers University, Middlesex County College, and Rutgers Robert Wood Johnson Medical School, the work groups discussed their strategic priorities, modified them as necessary, and developed three-year implementation plans. The entire food planning effort involved more than 30 small group meetings from August 2016 - January 2017.

Figure 3. Food Security Round Table October 8, 2016, New Brunswick



Phase III. New Brunswick Food System Action Plan

Following the October Food Round Table, the NBCFA work groups finalized their three-year plans and created the New Brunswick Food System Action Plan which includes actionable steps the work groups will take to meet their goals. From November 2016 to January 2017, each work group, as well as the New Brunswick Community Garden Coalition and Feeding New Brunswick Network, met to create its section of the Food System Action Plan. The sections are comprised of discrete action items that describe how each work group plans to accomplish its goals. The combined work group sections became the New Brunswick Food System Action Plan.

Figure 4. 2017 Winter Food Forum Flyer



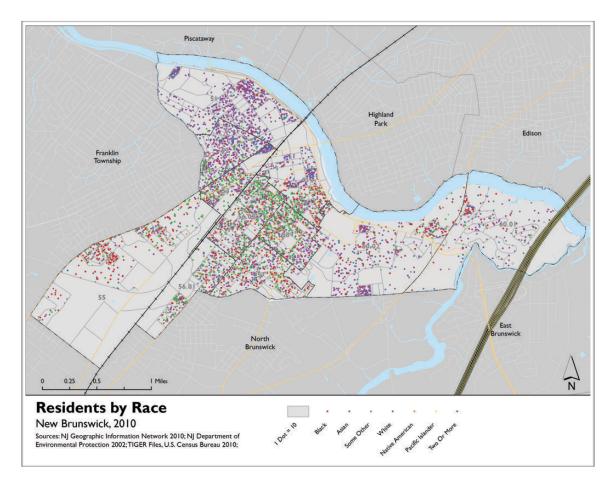
Chapter 2. New Brunswick Overview

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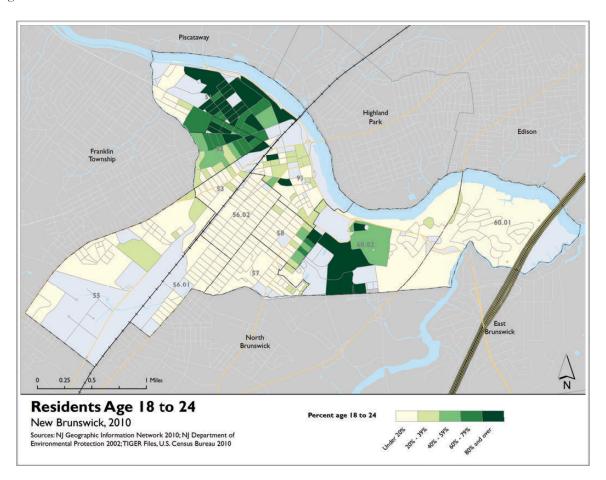
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New Brunswick, New Jersey, is a small city of 55,181 residents (US Census Bureau, 2010). It is the location of Johnson & Johnson's corporate headquarters and the New Brunswick campus of Rutgers, The State University of New Jersey. The city's population has increased over the last three decades due to immigration and an increase in the number of college students attending Rutgers. Between 26% and 30% (14,652 (±952)) of residents are estimated to be enrolled in an undergraduate or graduate program (US Census Bureau, American Community Survey (ACS) 2009-13, Table B14001). More than a third (38% (±3%)) of the estimated 55,275 (±46) residents were immigrants and many recent immigrants are from Mexico, the Dominican Republic, Honduras, Colombia, El Salvador, Guatemala, Nicaragua, and Ecuador (US Census Bureau, ACS, 2009-13). Many of the recent immigrants live in the Unity Square and Esperanza neighborhoods west and south of downtown. The city was also home to nearly 9,000 African American residents in 2010, which is a few thousand fewer than in 1990 (US Census Bureau, Table T7, 1990, 2010 Table P3). African-American residents live in most New Brunswick neighborhoods, but especially in the Georges Road area and the area around Route 27.



College students live in dormitories on the College Avenue and Douglass and Cook campuses and in non-Rutgers housing in the residential neighborhoods adjacent to those two campuses. The high concentration of students in and around the College Avenue and Douglass and Cook campuses is evident in the map below, which shows the location of people aged 18-24. While this group includes non-Rutgers students, we expect that many people in this age group are students. The population of student aged residents around the College Avenue campus extends downward towards Hamilton Street abutting a largely Latino neighborhood.



New Brunswick is a young city and more than half of the city's population is younger than 35 (54% or 29,930 people). In 2010 only 7% (3,994 residents) were over age 60 (US Census Bureau, 2010, Table P12). About 40 percent of New Brunswick's children under age 18 live in poverty (ACS 2009-2013, Table S1701).

More than a third $(36\% (\pm 3\%))$ of New Brunswick residents over 25 are estimated not to have completed high school. In the residential neighborhoods south and west of downtown, more than a third of adults over 25 are estimated to not have completed education through the 9th grade.

The increase in housing units has lagged compared to the city's population growth. The rental housing market is tight and many households share housing to afford it. The number of households with seven or more members increased in the last decade. Between 2000 and 2010, there was a 35% increase in the number of households occupied by seven or more people and a 25% increase in six person households (US Census Bureau 2000 Table H13, US Census Bureau 2010 Table H13). In three adjacent census tracts near downtown (53, 58, and 60.02) more than 20% of households had seven or more people.

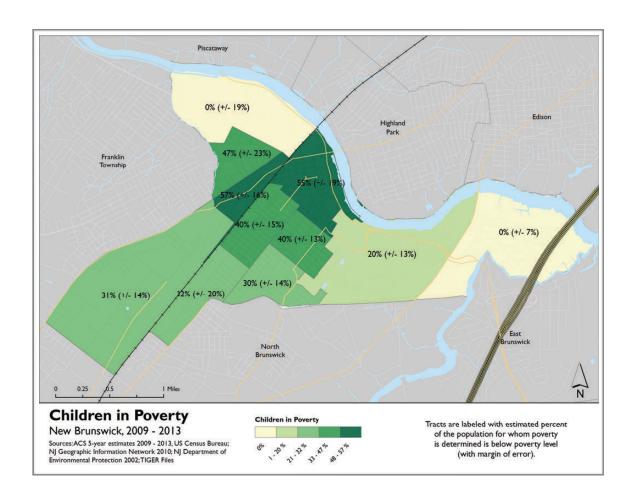


Table 1. Population and Housing Unit Change in New Brunswick, 1980-2010

	1980	1990	1980-1990% Change	2000	1990-2000% Change	2010	2000-2010% Change
People	41,442	41,711	+0.7	48,573	+16.5	55,181	+13.6
Housing Units	13,244	13,556	+2.4	13,893	+2.5	15,053	+8.4

US Census Bureau, 1980-2010, Tables P1 and H1; 1980 Tables T1 and T30

Table 2. Household Size in New Brunswick, 2000-2010

	2000	2010	Percent Change
1 person household	3,178	3,647	15%
2 person	3,062	3,035	-1%
3 person	2,104	1,985	-6%
4 person	1,754	1,775	1%
5 person	1,185	1,354	14%
6 person	688	861	25%
7 or more	1,086	1,462	35%

US Census Bureau, 2000 and 2010, Table H013

References

United States Census Bureau. (1980). US Census 1980 Summary Tape File 1. Retrieved from http://www.census.gov/prod/www/decennial.html

United States Census Bureau. (1990). US Census 1990 Summary Tape File 1. Retrieved from http://www.census.gov/prod/www/decennial.html

United States Census Bureau. (2000). US Census 2000 and 2010 Summary File 1. Retrieved from http://factfinder.census.gov

United States Census Bureau. (2013). American Community Survey 5 Year Estimates 2009-2013.

Chapter 3. Community Food Security

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Food security is a multifaceted concept that has been redefined many times over the last four decades. In the United States, government and nonprofit organizations broadly define it as "access by all people at all times to enough food for an active, healthy life" (Anderson, 1990: 1575). What access means often depends on the context in which the term is used. For instance, in the operational definition of food security, access is financial: households surveyed by the Census Bureau are classified as food insecure when they are unable to afford enough food for an active and healthy life (Coleman-Jensen, Rabbitt, Gregory and Singh, 2015). Access may be related to transportation, the ability to pay, the location of grocery stores or lack thereof, the availability of nutritious, fresh or culturally acceptable food, and public or private food assistance programs (Hamm and Bellows, 2003; Pothukuchi, Joseph, Burton, and Fisher, 2002; Alkon et al., 2013; Allen, 1999; Gottlieb and Fisher, 1996). In related frameworks such as food justice and food sovereignty, access is also associated with the ability to produce food and to influence the food system (Cadieux and Slocum, 2015; Alkon and Agyeman, 2011; Holt-Giménez, 2011). In this section, we provide a brief overview of the concept of food security and emphasize that access is a frequently used but often loosely defined term.

The concept of food security came to the fore in 1974, coinciding with the food and oil crises of the 1970s. The United Nations defined it as the availability of "adequate world food supplies...to sustain a steady expansion of food consumption and to offset fluctuations in production and prices" and it was measured by indicators such as the movement and supply of grain stockpiles (United Nations, 1975: 6; Allen, 1999; Anderson and Cook, 1999; Hamm and Bellows, 2003). The definition was later expanded to include economic access and entitlement. The World Bank reformulated the definition of food security as "access by all people at all times to enough food for an active, healthy life" which reflected a growing recognition among intergovernmental institutions and academics, that despite adequate quantities of food, hunger could persist because of high prices, low wages and a loss of farmlands (World Bank, 1986:V; Sen, 1981; Anderson and Cook, 1999; Maxwell, 1996).

By the mid-1980s, international definitions of food security were revised to include food quality, nutritional adequacy, environmental sustainability, anxiety about having enough food, self-determination and cultural acceptability. Thereafter, there was growing consensus that the household is a more appropriate unit of analysis than the nation, and that food insecurity should be operationalized qualitatively (Eide and Kracht, 2005; Maxwell, 1996; Anderson and Cook, 1999). In the US, food security was related to hunger (National Research Council, 2006). The introduction of fiscal austerity policies in the 1980s and the increase in poverty propelled hunger to the center of national debate. In response to concerns that cutbacks to public spending had increased hunger rates, President Reagan commissioned a task force to research food assistance programs. The panel determined that hunger cannot be measured objectively since it can be classified as a medical or social condition, and there was therefore insufficient evidence that budget cuts had reduced the availability of federal food assistance to the poor (President's Task Force on Food Assistance, 1984). This marked a progressive move towards alternative indicators of hunger, of which food security was one.

Measuring Food Security

The first household-level food security measure was included in the Current Population Survey (CPS) in 1995. This operationalized definition of food insecurity, which measured hunger as the inability to afford enough food, was built on research by the US Departments of Agriculture (USDA), Health and Human Services, and the Life Sciences Research Office of the Federation of American Societies for Experimental Biology (LSRO) among others. Disagreements about the usefulness of the word 'hunger' continued however, and by 2006, the Committee on National Statistics recommended its removal from the USDA definition of food insecurity. Hunger is only one possible effect of food insecurity (National Research Council, and National Research Council. 2006). Critics responded that this decision helped to depoliticize and sanitize the problem of hunger in the US (Allen, 2007; Markowitz and Brett, 2013).

The USDA monitors food security trends using data from the CPS. USDA defines food security as a household-level economic and social condition in which all members have "access at all times to enough food for an active, healthy life" (Coleman-Jensen et al., 2015: 2). Food insecurity is operationalized as limited access to adequate food because of a lack of money and other resources. Food insecure households are classified as having low food security (previously food security without hunger), or very low food security (previously food security with hunger). The distinction is that households with low food security report reduced diet quality because of limited resources; households with very low food security also report eating less or skipping meals because of their inability to afford enough food (Coleman-Jensen et al., 2015).

Community Food Security

Many food security advocates and community groups have placed other aspects of food security and access that are not included in the USDA's measure in the foreground. Community food security (CFS) is an example of a framework that situates individual and household food security within the larger food system and history of urban disinvestment (Winne, 2004; Pothukuchi et al., 2002). Hamm and Bellows (2003:40) developed the most widely cited definition of community food security as a "a situation in which all community residents obtain a safe, culturally acceptable, nutritionally adequate diet through a sustainable food system that maximizes community self-reliance and social justice."

Community food security suggests that the extent to which a community is food secure depends on many things that operate at the individual and community level. This includes household income, the prevalence of diet-related health disparities, the location of food stores and markets, the availability of affordable, fresh and culturally appropriate food, the presence of household cooking and storage facilities, transportation options, patterns of food production and distribution, the strength of a local food economy, and the effectiveness of federal and private food assistance programs. Many community food security interventions then are enacted at the level of local governance, for example, through the establishment of food councils, and participatory or collaborative food assessments. Practical strategies for improving community food security often employ a community and economic development framework, and include things such as direct marketing between farmers and consumers, community and urban gardening, culinary training, nutrition education, farm-to-school initiatives, and the creation of small food processing businesses (Winne, 2004; Gottlieb and Fisher, 1996; Pothukuchi et al., 2002; Anderson and Cook, 1999; Allen, 1999; Hamm and Bellows, 2003).

Community food security is a broad framework which integrates diverse objectives. For instance, some community food security groups may be concerned with reducing hunger and improving access to food assistance programs, while others may be more active in local food production and food enterprise. This

flexibility reflects the way in which the concept evolved from different perspectives and in response to the changing political and economic conditions of 1980s and early 1990s (Anderson and Cook, 1999; Lezberg, 1999). Factors that influenced the development of community food security include the deepening of international development definitions of food security, the erosion of social safety net programs, the financial and structural changes that took place within the supermarket and agricultural industries, and a growing concern among food system and planning scholars that poor communities and communities of color were being disproportionately affected by diet-related health problems (Ashman et al., 1993, Allen, 1999; Gottlieb and Fisher, 1996; Pothukuchi et al., 2002; Hamm and Bellows, 2003; Anderson and Cook, 1999).

Immigrants may face additional challenges to food security. Guarnaccia, Vivar, Bellows, and Alcaraz (2012) argue that dietary acculturation plays a significant role in the health outcomes of Mexican migrants in the US. Guarnaccia and colleagues define dietary acculturation as the changes that occur in food-ways through the process of migration. For the authors, these changes result from macro-level factors that are both economic (i.e., a change in employment) and ecological (i.e., changing availability of familiar or locally produced foods) (Guarnaccia et al., 2012). In Oaxaca, Guarnaccia et al. discerned a range of foodways. In the city, participants shopped small quantities of food multiple times a week at a central market selling local produce and meat. People in this city had not grown their own food since the land around their homes was not cultivable. Most had a stove, but only some could afford a refrigerator. In the coastal town, residents grew some food (cactuses, fruit trees) as they had large, enclosed yards. They also purchased fruit, vegetables, and fish from food trucks that would travel through the town. Participants from the rural community produced most of their own food. Rural residents raised chicken and grew corn and beans. However, women could not grow their own food all year around because agriculture was dependent on rainfall, while many men had migrated. Money from remittances was used to buy the extra corn, although it was difficult to travel to stores since the nearest highway was an hour away, and residents did not own vehicles (Guarnaccia et al., 2012).

In Central New Jersey, the authors found that Oaxacan migrants were presented with a "paradoxical set of choices" (Guarnaccia et al., 2012: 115) with regards to their dietary habits. The resultant changes are described as positive and negative. First, while participants had access to refrigerators and a greater selection of food in the US, the quality of food in nearby supermarkets is described as moderate, and the prices high. For these reasons, families tried to shop once a week at large supermarkets in neighboring communities, but these trips tend to be time consuming and costly (Guarnaccia et al., 2012). Similarly, and in contrast to participants in Oaxaca, migrants in New Jersey consumed a lot of meat because it was inexpensive. However, participants complained that the meat was not fresh and the quality lower. Similarly, Oaxacan foods were readily available but were usually expensive and not fresh. When eating out, the authors note that participants preferred to try something different, and not eat at Oaxacan restaurants. Instead, they usually ate at fast-food restaurants, since these were affordable and available (Guarnaccia et al., 2012).

Guarnaccia and colleagues report that the dietary changes in children were more pronounced. While children in Oaxaca ate food prepared at home, the children of Oaxacan migrants in New Jersey consumed and started preferring 'American-style', foods served at school breakfasts, and lunches. Although parents try and work during different times of the day to prepare meals and supervise their children, their ability to do so was constrained because they work long hours and multiple jobs. When the children would visit Oaxaca during the summer, relatives would notice how they were visibly heavier than their Oaxcan counterparts, did not eat chiles or spicy food, and preferred pizza and other types of fast food (Guarnaccia et al., 2012). Guarnaccia and colleagues interpret the negative effect of dietary acculturation on children through the idea of the "Latino Paradox." First generation Latinos tend to have better health outcomes than second or third generation immigrants, and to their US white counterparts, despite having a lower socioeconomic status, and coping with the stress of migration (Markides and Coreil, 1986).

The authors stressed that the lack of money is the primary barrier that prevented participants in Oaxaca and New Jersey from obtaining the foods they want and that are healthy to them. Participants had good knowledge of healthy diets, but explained that their money would not stretch that far (Guarnaccia et al., 2012). This finding has been documented in similar studies (see for instance Minkoff-Zern, 2014). Yet nutrition education programs typically assume that immigrants do not know how to eat healthfully. Noting how a clinic in Oaxaca had advised one of the participants to revert to a traditional Mexican diet, Guarnaccia et al. suggest that education programs in the US do the same. Additionally, programs could teach Oaxacan families how to prepare fruit and vegetables sold in the US. Guarnaccia and colleagues recommend that school meals be expanded as way of "de-stigmatizing diverse ethnic food-ways," while school gardens could be used for educational purposes (Guarnaccia et al., 2012: 116). And farmers markets, according to the authors, "work well in Mexican immigrant communities because they approximate the mercados people are used to in their home country" (Guarnaccia et al., 2012: 116).

Food Security in New Brunswick

Between 2009 and 2012, four organizations surveyed New Brunswick residents and asked questions related to hunger or food security. Each survey used a slightly different approach and surveyed different populations (e.g. permanent residents, all residents, people with children), and none used a full complement of food security questions. The estimates of food insecurity vary considerably (see Table 1). The Eagleton Institute 2012 survey found that people with lower incomes, less education, Hispanic households, households with children, and those who are younger are less likely to be food secure. The New Brunswick Tomorrow - Eagleton 2012 survey is conducted every four years (Eagleton, 2012: 6). This survey found that about a quarter of those surveyed have a household member with diabetes and a fifth have a household member with obesity or a weight related issue (Eagleton, 2012). Eagleton found that more than a tenth (12%) "of New Brunswick households are 'Completely food insecure.' Respondents from these households answered 'Always' to each of the three question or 'Always' and 'Sometimes'" (Eagleton, 2012:112).

From these surveys alone it is hard to know exactly how many people lack food security and just how food insecure they are. It is also difficult to understand why people lack food security. While we focus on food throughout this report, we are continually reminded of the need to consider the causes of poverty as well as food insecurity given the close relationship.

Table 1. Food Security Surveys in New Brunswick

	New Brunswick Tomorrow Community Survey	New Brunswick Tomorrow Needs Assessment	NJ Childhood Obesity Survey	New Brunswick Community Survey
Funder	New Brunswick Tomorrow with Eagleton	New Brunswick Tomorrow with Bloustein School	NJ Partnership for Healthier Kids	NB Community Farmers Market
Year	2012	2011	2009-2010	2009
Survey Goal	Capture quality of life and track reaction to changes in NB since revitalization efforts	Assess needs and conceptions of residents regarding various aspects of everyday life, noting satisfaction	Provide baseline data on characteristics associated w/ childhood obesity to develop interventions	Assess food intake patterns, barriers to healthy eating, preferences about Farmers' Market, and food insecurity status
Sampling Method	Address based, with cell sample	Address-based stratified random sample, plus convenience sample	Random digit dial landline only	Convenience
Mode	Telephone	Mixed mode: Mail and three in-person sites	Telephone	Door-to-door and at the Farmers Market
Sample Size	750	724	208	1,072
Response Rate	unknown	25%	49%	data not available
Sampling Frame	Permanent NB resident households	All households in NB	Only households w/ children 3-18 Years	All households in NB
Percentage of NB Residents Reporting Food Insecurity	41%	13%	28%	52%
How Was Food Security Measured?	Additive scale based on three items from the HFSS (HH2-HH4)	HFSS one-item screener used to determine food security (HH1)	One item from HFSS (HH1)	Five item shortened HFSS scale (verbal communication, data requested)

References

Alkon, Alison Hope, and Julian Agyeman. (2011). *Cultivating food justice: Race, class, and sustainability*. MIT Press, October 21.

Alkon, Alison Hope, Daniel Block, Kelly Moore, et al. (2013). Foodways of the urban poor. *Geoforum* 48: 126-135.

Allen, Patricia. (1999). Reweaving the food security safety net: Mediating entitlement and entrepreneurship. *Agriculture and Human Values* 16(2): 117-129.

Allen, Patricia. (2007). The disappearance of hunger in America. Gastronomica 7(3): 19-23.

Anderson, Sue Ann. (1990). Core indicators of nutritional state for difficult-to-sample populations. *The Journal of Nutrition* 120(11): 1557-1599.

Anderson, Molly D., and John T. Cook. (1999). Community food security: Practice in need of theory?. *Agriculture and Human Values*, 16(2), 141-150.

Ashman, Linda, Jaime De La Vega, Marc Dohan, et al. (1993). Seeds of change: Strategies for food security for the inner city. UCLA, June.

Bauer, Katherine W, Mary O Hearst, Kamisha Escoto, Jerica M. Berge, and Dianne Neumark-Sztainer. (2012). Parental employment and work-family stress: associations with family food environments. *Social Science and Medicine* 75(3): 496-504.

Bowen, Sarah, Sinikka Elliott, and Joslyn Brenton. (2014). The joy of cooking? Contexts 13(3): 20-25.

Cadieux, K Valentine, and Rachel Slocum. (2015). What does it mean to do food justice? *Journal of Political Ecology* 22: 1.

Coleman-Jensen, Alisha, Christian Gregory, Matthew Rabbitt, and Anita Singh. (2015). *Household Food Security in the United States in 2014*. Economic Research Report, 194. US Department of Agriculture, Economic Research Service. Retrieved from https://www.ers.usda.gov/publications/pub-details/?pubid=45428

Devine, Carol M, Tracy J Farrell, Christine E Blake, et al. (2009). Work conditions and the food choice coping strategies of employed parents. *Journal of Nutrition Education and Behavior* 41(5): 365-370.

Eagleton Center for Public Interest Polling. (2012). New Brunswick Tomorrow final report of New Brunswick Survey. New Brunswick. Rutgers. October 17.

Eide, Wenche Barth, and Uwe Kracht. (2005). Food and Human Rights in Development, Vol. I: Legal and institutional dimensions and selected topics. Antwerpen-Oxford: Intersentia.

Federal Agriculture Improvement and Reform Act of 1996. (2012). Retrieved from https://nifa.usda.gov/program/community-food-projects-competitive-grant-program-cfpcgp

Gottlieb, Robert. (2001). Environmentalism unbound: Exploring new pathways for change. Vol. 11. Boston: MIT Press.

Gottlieb, Robert, and Andrew Fisher. (1996). "First Feed the Face": Environmental justice and community food security. *Antipode* 28(2): 193-203.

Grantmakers in Aging. (2015). Hunger. Retrieved from http://www.giaging.org/issues/senior-hunger/

Guarnaccia, Peter J, Teresa Vivar, Anne C. Bellows, and Gabriela V Alcaraz. (2012). 'We eat meat every day': ecology and economy of dietary change among Oaxacan migrants from Mexico to New Jersey. *Ethnic and Racial Studies* 35(1): 104-119.

Gundersen, Craig, and Joseph Gruber. (2001). *The dynamic determinants of food insufficiency*. Second food security measurement and research conference. Food Assistance and Nutrition Research Report

Hamm, Michael W., and Anne C. Bellows. (2003). Community food security and nutrition educators. *Journal of Nutrition Education and Behavior* 35(1): 37-43.

Holt-Giménez, Eric. (2011). Food security, food justice, or food sovereignty. crises, food movements, and regime change. In, Alkon, AH, and Agyeman, J. (Eds.) *Cultivating Food Justice: Race, Class, and Sustainability:* Boston: MIT Press. 309-330.

Leete, Laura, and Neil Bania. (2010). The effect of income shocks on food insufficiency. Review of Economics of the Household 8(4): 505-526.

Lezberg, Sharon. (1999). Finding common ground between food security and sustainable food systems. Paper presented at the 1999 Joint Meetings of the Agriculture, Food and Human Values Society and the Association for the Study of Food and Society, Toronto, Canada.

Markides, Kyrianos S., and Jeannine Coreil. (1986). The health of Hispanics in the southwestern United States: an epidemiologic paradox. *Public Health Reports* 101(3): 253.

Markowitz, Lisa, and John A. Brett. (2013). US Food Policy: Anthropology and Advocacy in the Public Interest. Routledge, September 13.

Maxwell, Simon. (1996). Food security: a post-modern perspective. Food Policy 21(2): 155-170.

Minkoff-Zern, Laura-Anne. (2014). Knowing "Good Food": Immigrant knowledge and the racial politics of farmworker food insecurity. *Antipode* 46(5): 1190-1204.

National Research Council, and National Research Council. (2006). Food insecurity and hunger in the United States: An assessment of the measure.

Pothukuchi, Kami, Hugh Joseph, Hannah Burton, and Andy Fisher. (2002). What's Cooking in Your Food System? A Guide to Community Food Assessment. Los Angeles: Community Food Security Coalition.

President's Task Force on Food Assistance. (1984). Report of the President's Task Force on Food Assistance. Washington, DC: U.S. Government Printing Office.

Ribar, David Christopher, and Karen S. Hamrick. (2003). *Dynamics of poverty and food sufficiency*. *Economic Research Service*. USDA. no. 36: 33.

Rose, Donald. (1999). Economic determinants and dietary consequences of food insecurity in the United States. *The Journal of Nutrition* 129(2), 517S-520S.

Rose, Donald. (2007). Food stamps, the Thrifty Food Plan, and meal preparation: the importance of the time dimension for US nutrition policy. *Journal of Nutrition Education and Behavior* 39, no. 4: 226-232.

Sano, Yoshie, Steven Garasky, Kimberly A. Greder, Christine C. Cook, and Dawn E. Browder. (2011). Understanding food insecurity among Latino immigrant families in rural America. *Journal of Family and Economic Issues 32*(1), 111-123.

Sen, Amartya. (1981). Poverty and famines: an essay on entitlement and deprivation. Oxford: Oxford University Press.

United Nations. (1975). Report of the World Food Conference, Rome 5-16 November 1974. New York: United Nations.

United States Census Bureau. (2010). US Census 2010 Summary File 1. Retrieved from http://factfinder.census.gov

World Bank. (1986). World Development Report 1986. Oxford: Oxford University Press. Retrieved from https://openknowledge.worldbank.org/bitstream/handle/10986/5969/WDR%201986%20-%20English.pdf?sequence=1

Winne, Mark. (2004). Community food security: Promoting food security and building healthy food systems. Venice, CA: Community Food Security Coalition.

Winne, Mark, Hugh Joseph, and Andy Fisher. (1997). Community food security: A guide to concept, design and implementation. Community Food Security Coalition.

Chapter 4. Anti-poverty and Food Security Initiatives in New Brunswick

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Community organizations, residents, universities, medical institutions, corporations, and statewide advocacy organizations have worked together to reduce hunger and poverty and to improve individual and community food security in New Brunswick for more than four decades. They have worked to strengthen public food and poverty assistance by expanding healthy and affordable food access, providing education, expanding food-related community economic development, and conducting research. The collaborators organized initially through anti-poverty efforts, shifted to addressing food security within the community development arena and more recently have embraced food security as an area for economic and small business development. We begin by discussing efforts to build a food security organization in the 1990s and how those efforts led to the creation of the New Brunswick Community Food Alliance in the 2010s.

Anti-Poverty Programs and Community Food Insecurity

New Brunswick's community- and faith-based organizations began to work on food through anti-poverty programs in the 1980s. Community advocates, activists and organizations, many of whom were involved in launching Elijah's Promise, Making it Possible to End Homelessness, and what evolved into a statewide coalition called Solution to End Poverty Soon (STEPS, which later shifted from a statewide coalition to a local organization in Ocean County), pursued anti-poverty food related programming. In addition to providing food, these organizations sought to expand access to governmental anti-poverty programs. STEPS involved a group of advocates and low-income people who worked to increase living wages, expand affordable housing and food stamp access, and prevent the elimination of welfare to individuals through a statewide mobilization effort that New Brunswick leaders helped spearhead.

The Shift to Community Food Security

New Brunswick community organization staff and university faculty began working together in the 1990s through a community food security approach. The Community Health and Environmental Coalition of New Brunswick (CHEC-NB) emerged as a community-university collaboration to improve community food security. These efforts paralleled and engaged the development of the national Community Food Security

Coalition, founded in 1996, and a USDA-funded local food systems research project that began in 1999. In the early 1990s, Rutgers Nutritional Sciences Professor Michael W. Hamm began to develop sustainable, local, systems-oriented approaches to meeting food and nutritional well-being for producers and consumers in and near New Brunswick, New Jersey, within the Rutgers Urban Ecology Program (UEP) that he founded.

The Program included a student organic farm project that supported the first university-based student run community supported agriculture (CSA) project in the United States, a New Brunswick primary school food and nutrition education and curriculum development project, a food entrepreneurship project for a youth farm stand that targeted and trained at-risk high school students in New Brunswick, a new undergraduate class entitled Local Food Systems in a Globalizing Economy (the first of its type in the US) that, among other things, studied urban livestock agriculture in Middlesex County (Bellows et al, 2000), and by the end of the 1990s, a farm-to-school provisioning program in New Jersey. Additionally, under contract with the New Jersey Department of Human Services, a statewide food security assessment was carried out (Bellows et al., 2005). In the 1990s, Rutgers research faculty members Ralph Coolman and Anne Bellows (the latter also a New Brunswick resident and activist) cooperated with Mike Hamm in developing these programs to reach out to New Brunswick community members and area farmers to stimulate interest and participation in strengthening community food systems. Mike and Anne together introduced a definition of community food security that became accepted at the national level. Community food security is defined as a "situation in which all community residents obtain a safe, culturally acceptable, nutritionally adequate diet through a sustainable food system that maximizes community self-reliance and social justice" (Hamm and Bellows, 2003: 37).

Beginning in 1996, the UEP began a USDA-funded Community Food Project and in 1999, Mike Hamm won a three-year grant for "The Green House Project." Modeled on the work of Barbara and Eliot Coleman who developed season extension growing strategies in Maine, the Green House Project introduced unheated plastic structures at large (wind tunnels) and small (hoop houses) scales to grow vegetables and herbs into the northern winter months. Two large buildings were established on Rutgers Land Grant fields. Smaller scale hoop houses were designed and introduced in tandem with a general promotion of backyard and community garden production of edible produce.

The Green House Project included funding to establish a local food policy council, a form of local food governance developing in a few locations in North America and a few other countries. Verdie Craig was hired as part-time coordinator/community organizer to launch this effort and dozens of meetings were held to flesh out an approach to coordinate efforts to improve food security in New Brunswick. Attendees of these meetings did not embrace the food-specific orientation of a food policy council and opted instead for a larger topical umbrella, forming CHEC-NB. Through the Green House Project, from 2000-2002, CHEC-NB coordinated community outreach for cooking and nutrition classes, offered in partnership with Robert Wood Johnson University Hospital Community Service and located at the George Street Co-op and the New Brunswick Free Public Library, through the steady support of Library Director, Robert Belvin. CHEC-NB also handed out recipes, nutrition, and lead remediation information while tabling at one or more St. Peter's University Hospital Health Fairs. The Second Ward Neighborhood Block Club and Crime Watch, which was then headed by Morris Kafka, was an additional organizing hub for promoting community food systems and programs.

The CHEC-NB group began discussions with the City in early 2000 to establish a quasi-permanent community garden diagonal from the Chandler Health Clinic on George Street (now Hope VI housing). CHEC-NB developed a relationship with the City Fire Department to fill rain barrels. A partner organization, Food Not Bombs, helped identify the George Street garden space and assisted with planting and weeding. When the Hope VI community redevelopment program advanced, and the garden was slated for

redevelopment, CHEC-NB worked with the City to identify a new location for the garden on Suydam Street. Verdie Craig, with oversight from Rutgers Nutritional Sciences, coordinated this effort. After Verdie left CHEC-NB, Rutgers hired Lorena Gaibor, who worked on the project from approximately 2002-2004. While Verdie was involved in the early work on the Suydam Street garden, Lorena saw it through to its implementation. Elijah's Promise provided office space at their Neilsen Street location from approximately 2000-2004 and developed their engagement with food systems work during this time.

New Brunswick has been home to many waves of new immigrants. Since the late 1980s and early 1990s, the influx has tended toward a Spanish speaking Mexican and Central American cohort. Outreach to this population, that often has experienced food insecurity as well as a wealth of farm and food production and cooking experience, benefitted from the recruitment of bilingual community activist Teresa Vivar who went door-to-door with Anne Bellows, particularly in New Brunswick's Second Ward, to talk with residents about growing their own produce. A founder of the education and cultural non-profit organization Lazos America Unida, Teresa Vivar recruited many Spanish (and some indigenous) first language participants into the increasingly diversified New Brunswick food engagements. In coordination with the Rutgers student organic farm, various vegetable, herb, and flower starts were made available to any household that allowed Anne and Teresa to visit. Through the agronomic and design support of Ralph Coolman, community members' principal demand for marigold starts led to a focused use of the large-scale wind tunnels (from the Green House Project) for larger scale marigold production. The effort was run by teams of volunteers orchestrated through Lazos America Unida and dedicated to the New Brunswick 'Day of the Dead' celebration. Intricately decorated family altars, built to honor and remember past loved ones, always feature the marigold flowers. Volunteer participants who tended the marigolds from May through October were also eligible for a garden plot at the Rutgers University Student and Community Garden project.

In the first half of the 2000s, CHEC-NB became increasingly integrated into the Health Task Force efforts coordinated by New Brunswick Tomorrow, especially in the Lead and Obesity Task Force groups. CHEC-NB and the Green House Project had collected data on lead poisoning in the New Brunswick garden locations and developed and taught strategies to minimize that risk, especially through raised beds, and it imported clean and organic soils for food cultivation. Lazos America Unida teamed up with Rutgers to conduct trainings on nutrition education and exercise which were being integrated into community gardening programs.

The CHEC-NB organizing group began to dissipate as the Green House Project funding dwindled and the formal connection to Rutgers was further weakened when Mike Hamm left New Brunswick in 2002, and then Anne Bellows in 2006. Concurrently, community volunteers and staff focused efforts in other directions. Nevertheless, what began as the UEP drew in residents who continue to lead the community today. In 2003, sisters Teresa Vivar and Maria Vivar spearheaded the development of a school garden and related curriculum development project at the New Brunswick Charter School on Joyce Kilmer Avenue. By about 2005 the community food security efforts became more institutionalized and Elijah's Promise, and later Unity Square, took more significant leadership roles. Around 2006 Lorena Gaibor, by then working part time at Elijah's Promise, attempted to revamp CHEC-NB (but without this name) and to expand the community garden effort. In approximately 2008 Lorena transferred her work to Unity Square and the gardening effort expanded. Among other efforts, Teresa Vivar has pushed to create an urban 4-H program in New Brunswick (Ocasio, 2010).

Building Organizational and Institutional Capacity

As the CHEC-NB group evolved, other New Brunswick community organizations and institutions expanded their capacity to address poverty through food and worked to assess food security and poverty-related challenges in parallel with the CHEC-NB efforts described above. We discuss: Elijah's Promise, a community food organization; the Rutgers University Collaborative, an institutional project within Rutgers to expand community engaged learning with community partners; the New Jersey Partnership for Healthy Kids; and Johnson & Johnson, which has its corporate headquarters in New Brunswick. Its staff have worked on anti-poverty programs and programs to improve food security for decades.

Elijah's Promise

Elijah's Promise and its former director, Lisanne Finston, worked with city, state, and federal actors to reduce poverty and improve food insecurity. Elijah's Promise's mission is to end hunger; break the cycle of poverty; promote healthy, sustainable food; empower individuals through job training and opportunity; and create businesses that create social good. Elijah's Promise is a comprehensive community food organization that includes Promise Cafe (1989-), Promise Culinary School (1997-), and Promise Community Garden (2010-). Elijah's Promise provides opportunities for people to receive healthy and nutritious food, to learn the skills to move themselves from poverty, and to grow their own food. To focus on its core mission, Elijah's Promise recently closed Better World Cafe (2009-2016) and A Better World Market (2015-2016), which are discussed below.

Although Elijah's Promise began as a soup kitchen, Lisanne Finston quickly recognized that the organization needed to address poverty. To that end, Elijah's Promise created Promise Culinary School which teaches skills for entry-level employment in the foodservice industry. The six-month, state-certified job training program has trained more than 650 individuals since its inception in 1997. The school has trained people with low-incomes, disabilities, and those who are homeless and unemployed. Students receive instruction in math, communication, life and job readiness skills, and complete an externship at a local food service establishment where they receive hands-on job training, which helps with the transition from school to work. The program's graduation rate is approximately 85% and, of those who graduate, 95% are placed in jobs. Partial or full financial assistance is provided to many students, which ensures opportunities for individuals of all backgrounds. Job training and placement however were not the only reasons for poverty.

Elijah's Promise's Promise Kitchen serves more than 300 meals a day and 100,000 people per year. Volunteers and Promise Culinary School graduates cook nutritious meals using fresh ingredients (Voorhees Fellows, 2013). Because guests often need supportive services, a social services team provides information and referrals for housing assistance and medical services including mental health and addiction counseling. Promise Clinic, an on-site service program medical students started, provides health and vision screenings, flu shots, and HIV/AIDS prevention and testing (Jimenez et al, 2008). Elijah's Promise's Homeless Empowerment Action Response Team (HEART) delivers food, blankets, hygiene products, and service referrals to homeless people in Middlesex County. Staff and peer workers help homeless people find housing and facilitate entry into treatment for substance abuse and mental illness. The Community Kitchen also operates as warming center for the homeless during harsh winter nights. The "code blue" program goes into effect when temperatures dip below freezing or it is snowing and guests may stay from 7pm to 7am.

Elijah's Promise created Promise Community Garden, Urban Orchard, and Apiary to provide New Brunswick residents with the space and educational resources to grow their own food since 2010. The garden, which is located a few blocks from the Community Kitchen, shares the best, most cost-effective practices for growing successful gardens and increases access to fresh food for low-income residents. For \$15,

residents could lease a raised garden bed for one growing season. Group work days and specialized workshops support gardeners. A partnership between Elijah's Promise and the Rutgers School of Environmental and Biological Sciences (SEBS) led to the creation of a 35-tree apple orchard at the garden in 2013 and Promise Garden added an apiary in 2015 and another hive in 2016 (Rutgers SEBS AES Newsroom, 2013).

Elijah's Promise's A Better World Cafe, A Better World Market, and community supported agriculture (CSA) programs were innovative efforts that offered paradigm



shifting approaches to reducing poverty and improving food insecurity. A Better World Cafe was a community kitchen that provided healthy, sustainable food for all regardless of ability to pay. The cafe was located in a church in the adjacent town of Highland Park. Those who could afford to pay paid a little more for their meals to subsidize those who chose the daily complimentary meal. Volunteers, staff, and Promise Culinary School graduates procured local produce when possible and created nutritious seasonal menus. Guests selected meals by size to reduce waste, the kitchen produced little trash, and excess food was composted and used in the church's gardens. Guests sat at long tables and it was not uncommon to see groups of people from a variety of communities eating and talking. Proceeds were cycled back to Elijah's Promise to provide food and resources to those in need.

Elijah's Promise opened A Better World Market in nearby Somerset, NJ on a busy highway. A partnership with Suydam Farms, Better World Market worked with the NJ Farm Bureau to source and sell local produce, prepared and sold their own food, and provided job training and job opportunities for Promise Culinary Kitchen trainees. The market connected farmers with consumers, and directed profits to the Elijah's Promise Community Soup Kitchen. Better World Market's offerings included local produce, baked goods from the Elijah's Promise's Better World Bakery, and products from small New Jersey businesses. *New Jersey Monthly* magazine lauded the market for having the largest selection of Jersey-made food products under one roof (O'Brien, 2012).

Elijah's Promise's Community Shared Agriculture (CSA) program (2013-2015) brought fresh farm food into the city and supported its other programs. A diverse group of members supported the CSA, which ensured that Elijah's Promise could purchase shares for people who are homeless, those with HIV/AIDS and for use in the Community Soup Kitchen. The CSA pricing was stratified by income and provided healthy food access to anyone regardless of income. Following Elijah's Promise model of linking across its programs, it sold bread and desserts from Better World Bakery at pick-up. Music and food samples created from the week's share often greeted CSA members.

Rutgers University Collaborative

The Rutgers University Collaborative Center for Community-Based Research and Service has engaged students in community food work for many years. As the university's cross-disciplinary center devoted to community-based learning and civic engagement, the Collaborative has provided a reliable source of volunteers through its Bonner AmeriCorps program and capacity-building support through its Advancing

Community Development and Community-Based Research Assistant programs. The Collaborative has provided staff support for the New Brunswick Community Food Alliance for the past four-years. It has supported the Alliance's annual educational events including Food Forums, African-American History Month movies and panels, Cesar Chavez Day outreach, tabled at community events, and has taken and distributed notes at Food Alliance meetings. Amy Michael, Associate Director of the Collaborative, has been the Alliance's Membership Chair for the past five years.

Students who participate in the Collaborative's programs have conducted community-based research for the Alliance's Advocacy and Policy work group on city bee-keeping ordinances, urban pollinators policies, mobile food trucks, and client choice pantries. In the Advancing Community Development program, a partnership with Johnson & Johnson, students created a professionally produced promotional video for the Alliance, and outreach materials that included a PowerPoint presentation, marketing brochures, and a Community Cookbook. The Collaborative also partnered with Rutgers' Mason Gross School of Arts' Design Studio, whose students developed the Alliance's logo and visual identity. More recently, the Collaborative has partnered with Feeding New Brunswick Network and website and a Food Drive kit for the organization. It has also supported Feeding New Brunswick Network's technology needs to enable the Network to implement a central registration system. Additionally, students have written grants to support the Network. Finally, the Collaborative's Bonner AmeriCorps Program supports students who serve 8-10 hours per week as reliable volunteers to Five Loaves Food Pantry.

In its early incarnation as the Civic Engagement and Service Education Partnership Program (CESEP), staff from the Collaborative developed a statewide initiative entitled, "Learning to End Hunger" in partnership with the Bonner Foundation, Elijah's Promise, New Jersey Anti-Hunger Coalition and the New Jersey Higher Education Service Learning Consortium, in response to the food security crisis brought on by the 2008 Great Recession. In October 2009, the Collaborative organized the "Learning to End Hunger" conference featuring Mark Winne, the nationally recognized food justice activist. The Collaborative was also instrumental in creating a food stamp outreach project which was launched to address food insecurity by helping eligible community members to navigate the requirements to receive SNAP benefits. RU CESEP (now Collaborative) partnered with NJ Anti-Hunger Coalition, Elijah's Promise, and pantries in New Brunswick and other places to launch this food stamp outreach project modeled on work in Philadelphia.

New Jersey Partnership for Healthy Kids (NJPHK)

Launched in 2009, the New Jersey Partnership for Healthy Kids (NJPHK) has implemented strategies to reduce childhood obesity in New Jersey. It selected New Brunswick as one of its first pilot cities, along with Camden, Vineland, Trenton, and Newark. NJPHK supports activities to prevent childhood obesity, provides technical assistance and direction to local coalitions, and spearheads state environmental and policy changes (Fiester, 2014). The New Jersey YMCA State Alliance, which encompasses 41 corporate YMCA associations and 79 branches, is the state office for NJPHK. The New Jersey YMCA State Alliance receives funding from the Robert Wood Johnson Foundation which it directs to local coalitions. It selected New Brunswick as a pilot city because of the high share of individuals who live below the poverty line.

The New Brunswick Community Food Alliance developed, in part, out of a collaborative effort with NJPHK. Additionally, NJPHK has worked with Rutgers Cooperative Extension, assisting them with programs such as Functional Foods for Life, Get Moving-Get Healthy New Jersey, Grow Healthy FCHS School Wellness Initiative, and Small Steps to Health & Wealth. Furthermore, NJPHK has worked with the city of New Brunswick to implement policy changes and initiatives such as Ciclovia, a city-wide event where selected streets are closed to cars for five hours, which occurs three times a year. Activities along the Ciclovia

route, like games and musicians, encourage residents to be active and to explore New Brunswick. Additionally, the city government has updated its Complete Streets policy to make city streets safer for pedestrians, cyclists, and cars. The construction of the New Brunswick Health and Wellness Plaza, which includes a pool, has helped hundreds of New Brunswick students learn to swim and provided a space for community health, education, and fitness services. NJPHK recognized the City of New Brunswick for its commitment to resident health and wellness in 2015 with the Culture of Health Champion award (Bradshaw, 2015).

Johnson & Johnson

Johnson & Johnson (J&J), headquartered in New Brunswick, has long been committed to improving New Brunswick and the quality of life for the city's residents. It has often supported community food security, community health, and anti-poverty programs. It has funded projects to improve health and expand access to fresh food, including the New Brunswick Community Farmers Market, among many other efforts.

New Brunswick Community Food Alliance

Discussions between staff at J&J, Elijah's Promise, and DEVCO (a non-profit development organization that emerged from J&J's New Brunswick Tomorrow non-profit organizational effort to revitalize the city) brought back the idea of creating a New Brunswick food policy council. They worked with Nurgul Fitzgerald, Rutgers Department of Nutritional Sciences and William Hallman, Rutgers Department of Human Ecology to make it a reality. The Rutgers faculty and Lisanne Finston of Elijah's Promise led a team that received a USDA Healthy Communities Planning Grant in 2010. Their objective was to better understand community food security needs and to build a food policy organization to address them.

The grant provided funding for a graduate student who researched and presented a background paper in 2011 about food policy councils (Salemi, 2011). It also funded a set of community Food Forums to engage community residents in the food planning process. These Forums included the December 11, 2010 Learn, Grow, Share: Building a Stronger Food, Nutrition and Wellness Partnership Food Forum meeting. The collaborators drew on the graduate student's research about food policy councils, on the community contributions at the Food Forums and on the findings of the NJ Partnership for Healthy Kids New Brunswick planning process which suggested a need for a food policy council. They held a second forum on May 16, 2011 to guide the creation of a city food policy council. The New Brunswick Community Food Alliance launched in 2012:

"To serve as the City of New Brunswick's Food Policy Council, bringing together community partners and stakeholders to integrate aspects of the local food system (production, processing, distribution, access, consumption, recycling and waste management) to enhance the environmental, economic, social, and nutritional well-being and health of the New Brunswick community" (New Brunswick Community Food Alliance Bylaws, 2012).

The New Brunswick Community Food Alliance is organized around a core group of 17 voting members, non-voting members, and five work groups that engage community residents and others who work on community food security. These groups are: Advocacy and Policy, Agriculture, Community Engagement, Food Economic Development, and Healthy Food Access. Alliance members can attend general and working group meetings and participate in a variety of ways and most engage through work groups (Salemi, 2011; New Brunswick Community Food Alliance Bylaws, 2012).

The Healthy Food Access work group encourages schools, businesses, and other organizations to provide healthy and affordable food. The work group contributed to the Breakfast After the Bell program which is a collaborative effort with the city government and the New Brunswick public school system to provide healthy free breakfast for all school children. It also supports the Healthy Corner Store Initiative, a program to expand fresh food access in the city's corner stores (New Brunswick Community Food Alliance, 2014; Ramos et al., 2016; Lorts and Ohri-Vachaspati, 2015). The Community Engagement work group engages residents to improve community food security. The Food Economic Development work group promotes job creation, job skills development, and fosters local ownership and business development. The Advocacy and Policy work group promotes policies to improve access to healthy and affordable food for everyone. The Agriculture work group promotes sustainable agriculture, energy-efficient practices, and community gardening. The Agriculture work group works with the New Brunswick Community Garden Coalition, an informal Alliance partner, which is discussed in the community gardening paper. And, the Feeding New Brunswick Network, the other informal Alliance partner, is a coalition of food pantries and other emergency service providers and educators who work together to improve the capacity of New Brunswick's emergency food system (New Brunswick Community Food Alliance, 2014).

Conclusion

Since the 1980s, a variety of groups that include Elijah's Promise, Johnson & Johnson, the New Brunswick Community Food Alliance, and Rutgers University have employed a variety of tactics to address hunger, poverty and childhood obesity, such as through the provision of food education programs for residents of all ages and by expanded opportunities for affordable fresh and healthy eating. Direct community involvement and comprehensive research have aided in these efforts to understand and respond to local wants and needs. These organizations have learned from the community and past endeavors to better refine their programs and methods to create a healthier and food secure New Brunswick. Today the New Brunswick Community Food Alliance, amid a strategic planning effort, has hired a part-time staff person to facilitate organization, and has developed a three-year food plan that emerged out of this food assessment research and food planning process.

References

Bellows, Anne C., Verdie Robinson, Jennifer Guthrie, Troels Meyer, Natalie Peric, Michael Hamm. (2000). Urban livestock agriculture in the State of New Jersey, USA. Urban Agriculture Magazine. Special issue, Livestock in and around Cities. 1(2): 8-9.

Bellows, Anne C., Brian Schilling, Deborah Palmer Keenan, Lucas Marxen, and Audrey Adler. (2005). Improving Food Security for New Jersey Families: Identifying Food Source, Need, and Tools for Connecting. Food Policy Institute.

Bradshaw, Jennifer. (2015). City Receives Culture of Health Champion Award. Retrieved from http://thecityofnewbrunswick.org/blog/2015/12/14/city-receives-culture-of-health-champion-award/

Fiester, Leila. (2014). New Jersey Partnership for Healthy Kids: Progress Report. Robert Wood Johnson Foundation. Retrieved from http://www.rwjf.org/content/dam/farm/reports/program_results_reports/2014/rwjf413402

Hamm, Michael W., and Anne C. Bellows. (2003). Community food security and nutrition educators. Journal of Nutrition Education and Behavior 35(1): 37-43.

Jimenez, Manuel, Tan-Billet, Jennifer, Babineau, John, Jimenez, Jennifer Endres, Billet, Todd, Flash, Charlene, West, Bernadette, Tallia, Alfred. (2008). The Promise Clinic: A Service Learning Approach to Increasing Access to Healthcare. Journal of Health Care for the Poor and Underserved 19(3):935-943.

Lloyd, Kristen, Punam Ohri-Vachaspati, Susan Brownlee, Michael Yedidia, Dorothy Gaboda, and Jolene Chou. (2010). New Jersey Childhood Obesity Survey. Retrieved from http://www.cshp.rutgers.edu/downloads/8660.pdf.

Lorts, Cori and Punam Ohri-Vachaspati. (2015). Retail Food Stores in New Brunswick: A Research Brief. New Jersey Child Healthy Study. Retrieved from http://www.cshp.rutgers.edu/Downloads/10860.pdf

New Brunswick Community Food Alliance. (2012). Bylaws version 4.

New Brunswick Community Food Alliance. (2014). Retrieved from http://www.nbfoodalliance.org/

O'Brien, Dervela. (2012). Good food for all: A culinary program helps the disenfranchised. New Jersey Monthly. Retrieved from http://njmonthly.com/articles/jersey-living/good-food-for-all/

Ohri-Vachaspati, Punam, Kristen Lloyd, Derek DeLia, David Tulloch, and Michael Yedidia. (2013). A closer examination of the relationship between children's weight status and the food and physical activity environment Preventive Medicine 57(3):162-167.

Ohri-Vachaspati, Punam, David Tulloch, Nirvana Petlick, Diane Martinez, and Michael Yedidia. (2010). The New Jersey Childhood Obesity Study. New Brunswick Food Environment Maps. New

Brunswick: Rutgers Center for State Health Policy. Retrieved from http://www.cshp.rutgers.edu/Downloads/8440.pdf

Ocasio, Linda. (2010). I am New Jersey: New Brunswick woman helps Mexican community find its place. NJ.com. Retrieved from http://blog.nj.com/perspective/2010/12/post.html

Ramos, Nicole, Chung, Y., Lam, S., Christopher Ackerman, and Nurgul Fitzgerald. (2016). Does product placement influence customers' preferences for promotional materials in corner stores? New Jersey Dietetic Association 84th Annual Meeting, Long Branch, New Jersey.

Rutgers, the State University of New Jersey, School of Environmental and Biological Sciences Agricultural Experiment Station, Office of Communications. (2013). Rutgers helps grow community Orchard in New Brunswick. Newsroom. Retrieved from http://sebsnjaesnews.rutgers.edu/2013/05/rutgers-helpsgrow-community-apple-orchard-in-new-brunswick/

Salemi, Caitlin. (2011). Planning and Establishing Food Policy Councils: A Synthesis of Seven Conversations. Document prepared from the New Brunswick Food Security Planning Committee.

Voorhees Fellows. (2013). Farm to freezer. New Brunswick: Ralph W. Voorhees Center for Civic Engagement. Edward J. Bloustein School of Planning and Public Policy. Rutgers University. Retrieved from http://rwv.rutgers.edu/wp-content/uploads/2014/06/Farm-To-Freezer-Final-June-14.pdf

Voorhees Fellows. (2014). Improving community food security in New Brunswick. New Brunswick: Ralph W. Voorhees Center for Civic Engagement, Edward J. Bloustein School of Planning & Public Policy. Rutgers, The State University of New Jersey.

Appendix A. Timeline of Select New Brunswick Community Food Security Activities (1989-2015)

- 2016 (February) New Brunswick Community Food Alliance Winter Food Forum
- 2015 New Brunswick Parks & Gardens map by the Environmental Commission
- 2015 (August 21) Key Food supermarket opens
- 2015 (May 9) Planting to End Hunger garden at Suydam Street Reformed Church for food pantry distribution
- 2015 (April 18) Progressive Dinner tour through New Brunswick's community gardens, hosted by the New Brunswick Environmental Commission, New Brunswick Community Food Alliance Advocacy & Policy Work group, and the Community Gardens Coalition
- 2015 (March 31) Cesar Chavez Movie Night, by New Brunswick Community Food Alliance, RWJ University Hospital and Esperanza Neighborhood Project
- 2015 (March 28) New Brunswick Seed Swap, hosted by New Brunswick Community Garden Coalition
- 2015 (March 24) What's the Buzz on Urban Pollinators, vignettes and panel discussion hosted by the New Brunswick Environmental Commission
- 2015 New Brunswick High School community garden launch
- 2015 (January 10) New Brunswick Community Food Alliance Winter Food Forum, update of community food efforts in New Brunswick, breakfast provided, children's activities, English-Spanish translation, keynote speaker
- 2014 Rutgers University partnership with Unity Square
- 2014 New Brunswick Parks & Gardens map, New Brunswick Environmental Commission secures grant from the Association of New Jersey Environmental Commissions (ANJEC) to develop the map
- 2014 (October 30) Food Labor and Social Justice Policy Potluck hosted by Unity Square Comunidad
- 2014 (October 26) Fall Bulb Planting and End of Year Harvest hosted by Community Gardening Coalition
- 2014 (June) New Brunswick City Council resolution recognized Community Garden Coalition
- 2014 (May 24) Fresh Grocer supermarket closes
- 2014 (April 22) Composting 101: Earth Day Potluck and Workshop
- 2013 Rutgers Center for Urban Environmental Sustainability conducts a soil test
- 2013 Christ Church Community Garden opens
- 2013 (November 14) Place at the Table, NBCFA hosted film screening and panel discussion
- 2013 (October 21) Policy Potluck on getting healthy, local foods into New Brunswick public schools, hosted by NBCFA, GBCS, Food & Water Watch, Elijah's Promise, and New Brunswick Environmental Commission
- 2013 (September 12) Workshop: Getting Familiar with the Fall Garden, hosted by the NBCGC
- 2013 (May 11) Feeding New Brunswick Network holds focus groups with food pantry guests to get feedback
- 2012 (December 8) NBCFA December Food Forum, discussion about the Alliance, keynote, Alliance work group
 presentations, tables and how to become engaged
- 2012 (November) Fresh Grocer opens
- 2012 (October 24) NBCFA Public Potluck event at Sacred Heart Church in New Brunswick
- 2012 Food U trip to NYC hosted by Elijah's Promise and Rutgers RWV Center for Civic Engagement
- · 2012 Food U trip to Philadelphia hosted by Elijah's Promise and Rutgers RWV Center for Civic Engagement
- 2012 New Brunswick Community Garden Coalition's first Seed Swap
- 2012 (February 12) Urban Roots film screening hosted by NBCFA Agriculture work group and Elijah's Promise
- 2012 (February) New Brunswick Community Food Alliance established formally with approved bylaws
- 2012 Johnson & Johnson Community Garden established
- 2011 (November 16) City Council recognized New Brunswick Community Food Alliance
- 2011 (October 7) New Brunswick Community Food Alliance established

- 2011 New Brunswick Community Garden Coalition starts
- 2011 (May 16) Community Food Forum: Good Food for All in New Brunswick (Learn, Grow Share II), community
 meeting to better understand food-related issues and possible solutions in the city that informed the creation of the
 New Brunswick Food Alliance
- 2011 (March) NBFSPC USDA Hunger Free Communities Planning Grant to plan and implement a food council
- 2010 (December) Community Food Forum: Learn, Grow, Share, New Brunswick Food Security Planning
 Committee ran a day program for people interested in food security. They discussed creating a food policy council
- 2010 (Summer) New Brunswick Food Security Planning Committee planned the New Brunswick Community Food Alliance
- 2010 Shiloh Garden created by Elijah's Promise, New Brunswick city and New Brunswick United Methodist
- 2010 Jardín de Esperanza Community Garden created
- 2009 New Brunswick Community Farmers Market established
- 2009 First AmeriCorps VISTA in New Brunswick at Rutgers Cook College
- 2008 Feaster Park Community Garden created
- 2007 St. Isidore Field Community Garden created
- 2006 Suydam Street Garden: Organic Gardening Magazine and Aveeno; Compost System Construction, Butterfly Garden Establishment and Garden Beautification
- 2005 Lazos America Unida launches and later receives a grant to test soil in New Brunswick
- 2005 Second Ward Neighborhood Block Club and CHEC-NB, Suydam Street Garden Committee, and New Brunswick Lead Coalition; Safe Harvests
- 2004 Healthy Harvest Community Gardening Project by Second Ward Neighborhood Block Club; CHEC-NB
- 2004 Cook Student Garden created in its second location; it was originally founded in the 1970s
- 2004 Marigold Project created to grow marigolds for the Day of the Dead celebration
- 2003 Elijah's Promise grows and emphasizes the importance of healthy food
- 2002 Suydam Street (Jim Landers) Garden created
- 2000/2001 New Brunswick Community Health and Environmental Coalition in partnership with UMDNJ conducts focus groups in New Brunswick about food security
- 1999 CHEC-NB (Community Health and Environmental Coalition of New Brunswick) Formed, Rutgers
 University-affiliates Anne Bellows and Mike Hamm work with New Brunswick residents Verdie Craig, Heather
 Fenyk, and others to organize around food security
- 1989 Elijah's Promise Soup Kitchen created

Chapter 5. Food-related Programs Across the Lifespan

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There are many food-related assistance programs available to New Brunswick residents, and eligibility for most, although not all, is determined by age and/or income. In this chapter, we review some of the available programs in more detail in the order of the age groups to which they are targeted. We begin with programs available in schools for children, and in some cases, their families. We then discuss WIC, which is for pregnant women and young children, and SNAP, which is available for people across the lifespan. Finally, we describe programs that are restricted to those 60 and older.

Programs for Children and Youth Before, During, and After School

New Brunswick has a robust infrastructure that provides food to children and youth from preschool through high school. The programs provide food before, during, and after the school day during the academic year and over the summer. Federal food programs provide much of the food; donations and other food sources supplement these programs. Depending on the program specifics and eligibility criteria, children receive breakfast, lunch, and snacks during the academic year and over the summer. All students in the New Brunswick School District have access to free lunch and breakfast through the Community Eligibility Provision which helps low-income Local Education Agencies provide students breakfast and lunch meals at no cost to families. On average, the New Brunswick School District serves 6,200 breakfasts, 7,500 lunches, and 1,400 afterschool snacks per day.

Public schools, including charter and magnet schools, community organizations, and other certified locations such as summer camps implement the food programs. Schools and community organizations may also receive private assistance, and some private daycare centers provide food on their own. New Brunswick has eight elementary schools (K-5 or K-8), a middle school (6-8), an elementary charter school (K-8), and two high schools (9-12) (see Table 1). The city's pre-K program is implemented through public schools and private providers. There are 110 pre-K classrooms of no more than fifteen children each; 33 classrooms with 435 students are in public schools, and 77 classrooms with 1,155 children are housed in seven community organizations. Other organizations provide afterschool care and 26 locations were authorized to offer summer feeding programs in 2015.

Name Students pre-K K 2 3 4 5 6 7 8 9 10 11 12 Health Sciences Technology High School* 225 New Brunswick High School 1,625 New Brunswick Middle School 1,339 McKinley Community School 681 Woodrow Wilson Elementary School 445 Greater Brunswick Charter School* 381 Lord Stirling Community School 666 Paul Robeson Community School 562 684 Lincoln Elementary School Livingston Elementary School 565 Redshaw Elementary School 711 Roosevelt Elementary School 868 Private Pre-K

Table 1. Primary and Secondary Schools, 2014-2015

National School Lunch Program

As noted above, all New Brunswick public school students are eligible for free breakfast and lunch through the Community Eligibility Provision, which was instituted in New Brunswick in 2014 (USDA, 2016). However, before that was implemented, most students were eligible for free and reduced price lunch. During the 2012-2013 academic year, 93% of New Brunswick public school students (K-12) were eligible for free or reduced lunch, and 86% of these students were eligible for free school lunches (National Center for Education Statistics, 2014). Households with incomes at or below 130% of the poverty level qualify for free lunch and those with incomes 130% to 185% of the poverty level qualify for reduced price lunch (USDA FNS, 2015b; USDA FNS, 2012). Children are automatically eligible if their families receive Supplemental Nutrition Assistance Program (SNAP) benefits (USDA FNS, 2015c). In each New Brunswick school, except for Woodrow Wilson Elementary School, more than 80% of students were eligible to participate in the United States Department of Agriculture's (USDA) Free and Reduced Lunch Program (National Center, 2014; State of NJDOE, 2014).

The USDA has sought to ensure that more healthy foods are incorporated in the Free and Reduced Lunch program. A 2012 change increased the availability of fruits, vegetables, whole grains, and fat free milk and reduced sodium content and trans fats. Local school authorities choose foods so that each meal consists of 1 serving of milk; 2 servings of fruit/vegetables; 1 serving of grains and 1 serving of protein (USDA FNS, 2012). The New Brunswick District has lowered salt and sugar content and does not sell sugary drinks.

Some interviewees wondered whether the New Brunswick Public School District has the capacity to change school food because the reimbursement rates are set and the schools do not receive much money to further improve food. They suggested that a future research project might identify school districts that have

NJ Department of Education, School Performance Reports, 2014.

^{*}Magnet Public High School

further improved school food quality to better understand what made the changes possible. One interviewee wondered about whether it is possible to regularly offer water during school and summer programs. While water is often available, most students do not carry water bottles and water is not served with meals.

Table 2. Federal Food Program Descriptions, Eligibility in New Brunswick, and Select Rules

Federal Food Programs For Children And Youth	Purpose	Income Eligibility in NB	Age Eligibility	Time Of Day Food Can Be Served
National School Lunch Program (NSLP)	Federal cash and commodity assistance to schools that provide lunch for children from low-income families	All K-12 New Brunswick public students receive free lunch through the Community Eligibility Program.	18 and younger	During designated lunch only
School Breakfast Program	Federal cash assistance to schools to operate non-profit breakfast programs	All K-12 New Brunswick public students receive free breakfast through the Community Eligibility Program.	18 and younger	Before school starts, or after the school day begins, depending on the school
NSLP Afterschool Snack Program	Federal cash assistance to encourage schools to provide snacks after school	All K-12 New Brunswick public students receive this free, if available in their school	18 and younger	Afterschool during school licensed activity
Child and Adult Care Food Program (CACFP)	Federal cash assistance to child care and family day care centers, after- school programs, and adult daycare centers for meals and snacks	Community Eligibility applied on an institution-by-institution basis.	Meals and snacks for children and adult in day care programs and afterschool care programs	N/A
Special Milk Program	Reimbursement to schools and child care institutions for part of the cost of milk	Schools and childcare centers that do not participate in federal meal programs	Children in some daycare institutions	N/A
SNAP (Supplemental Nutrition Assistance Program)	Provides financial support to purchase supplemental food	~Monthly cash income <130% of the federal poverty line and asset rules	All ages	N/A
Summer Food Service Program (SFSP)	Federal cash and commodities to local schools and organizations that run summer programs for meals, snacks, and operating expenses	Free in New Brunswick because of Community Eligibility.	18 and younger and those with disabilities	None Specified
Fresh Fruit and Vegetable Program	Federal grants to schools that buy fresh food for snacks	Free in New Brunswick because of Community Eligibility	Elementary school students	Can be served anytime in school day except lunch and breakfast
WIC (Special Supplemental Nutrition Program for Women, Infants and Children)	Provides supplemental food and education	Up to 185% of poverty line and nutritionally at risk	Pregnant women and children through age 5	N/A
WIC Farmers Market Nutrition Program	Federal government provides funds to states that offer farm market coupons to individuals	Qualify to receive WIC	Pregnant women and children through age 5	N/A

Aussenberg and Colello, 2015; State of NJDOA, 2014; State of NJDOA, 2015a; State of NJDOA, 2015b; State of NJDOA, 2015c; Thomas, 2014; USDA FNS, 2013; USDA FNS, 2015c; USDA FNS, 2012.

^{*}Requires: 1 Serv. Milk, 2 Serv. Fruit/Vegetable, 1 Serv. Protein, 1 Serv. Grain

Universal K-8 Breakfast Program: Breakfast After the Bell

For many years, free breakfast was available to all public school students in the cafeteria before the school day started. However, not all students came to school early enough to eat. In an effort to increase participation, during the 2013-14 school year, the school district conducted a pilot of a Breakfast After the Bell program, which provides free breakfast in the classroom after the school day has started. The program expanded to all New Brunswick's public elementary and middle schools in September 2014. A large-scale evaluation of the program is currently under way. However, the early data has shown that the number of children receiving breakfast has increased significantly, from an average of 34% in the three years before the program began to an average of 73% in the two full years since the program started (Advocates for Children of NJ, 2016). New Brunswick High School continues to serve free breakfast in the cafeteria before the bell, and approximately 400 high school students (out of 1,700) receive breakfast daily.

Fresh Fruit and Vegetable Program

In 2016, New Brunswick received a \$158,840 grant to provide fruit and vegetable snacks at 5 elementary schools: Redshaw, Lord Stirling, McKinley Kindergarten, Paul Robeson Annex, and Roosevelt through the federal Fresh Fruit and Vegetable Program. The program's objective is to improve children's health through expanding access to fresh fruit and vegetables as snacks during the school day. The program funds public schools to purchase local, when possible, fresh fruits and vegetables which they provide to low-income elementary school students in schools in which 50% or more of the students qualify for the federal lunch program.

Early Childhood Programs

New Brunswick has community eligibility for the Child and Adult Care Food Program (CACFP), which funds food in early education schools, day care centers, and home-based day care homes (in other communities, it is for children from households with incomes below 130% of the poverty line) (State of NJDOA, 2015b). The nutrition requirements follow the federal nutrition guidelines and are adjusted for age. Public and private child care centers, Head Start programs, some home-based daycares and other centers licensed to provide child care are eligible to use the CACFP funding and guidelines to provide meals and snacks (USDA, 2015a). Children in pre-K public school classrooms also receive breakfast, lunch and a snack, administered according to the National School Lunch Program rather than CACFP.

A variety of food providers make food for the community organization locations. The school district reviews the menus to ensure that they meet federal guidelines. Some programs like Noah's Ark in Highland Park, which serves 30 children, cook on-site; Elijah's Promise prepares food for another school. The Puerto Rican Action Board (PRAB) runs the largest preschool program in New Brunswick, providing education to more than 580 children between the ages of 2 1/2 and 5. The program provides children with a free breakfast, lunch, and afternoon snack daily through the CACFP. The school day runs 6 hours with four additional hours of before and after care services and eligible children receive snacks during the extended day (PRAB, 2015). Acelero Learning runs two Head Start-certified centers for children ages 3-5 in collaboration with New Brunswick Public Schools and provides meals and snacks to all their students through the CACFP (Acelero Learning, 2015). Chartwells, the School District's food provider, makes meals and a variety of snacks for the pre-K students in the District.

Afterschool Nutrition Programs

The National School Lunch Program Afterschool Snack Program provides children who are involved in school district sponsored academic activities afterschool with a nutritious snack (FRAC, 2015). In New Brunswick, the program provides snacks for 1,500 children 6 and up at the K-5 elementary schools and at Wilson and McKinley (K-8). Snacks must consist of at least two components of the USDA's required food categories. The categories are: 1) a serving of milk, 2) a serving of meat or meat alternative, 3) a serving of vegetable or fruit, and 4) a serving of whole grain or enriched bread. Children are eligible to receive free snacks as part of the NSLP Afterschool Snack Program through age 18 (State of NJDOA, 2015a). Typically, students receive items such as a juice or fruit and chips or granola bars.

Two federally funded nutrition programs, the Child and Adult Care Food Program and National School Lunch Program Afterschool Snack Program, provide nutritional support for children who participate in enrichment activities afterschool and on weekends. The Child and Adult Care Food Program (CACFP) Afterschool Meal Program provides meals and snacks to children age 18 and younger afterschool, on weekends, and during school holidays to support children who may have difficulty obtaining food outside of school. As mentioned earlier, New Brunswick has community eligibility for this program. Afterschool programs in New Brunswick, such as Catholic Charities' Youth Enrichment Services School Age Program, provide New Brunswick children who participate in their activities with a snack using this program. Through this program, every student who comes from a household with income below 130% of the poverty level and attends Youth Empowerment Services (YES) activities receives a free dinner (NJSACC, 2013).

Some afterschool programs such as those at 4-H and Middlesex County College do not participate in the federal food afterschool or snack programs. For example, two New Brunswick high school student volunteers took an internship class where they worked on resumes, practiced job interviews and worked with the director at 4-H. Children who participate in these programs do not receive regular snacks and have mentioned that it is something they miss. Alternatively, some programs provide food during activities, but not consistently. YES provides food at many of its programs such as its afterschool programs and a summer camp but they report that finding funding for food is an ongoing challenge. In addition, about 50-60 children and youth participate at YES Excite Night and receive food three nights a week. A Rutgers student club teaches participants about nutrition and provides food on one of those evenings.

Greater Brunswick Charter School

The Greater Brunswick Charter School (GBCS) is a publicly funded school that operates outside of the New Brunswick Public School District. It is therefore not included in New Brunswick's Community Eligibility for free meals, but 85% of GBCS students are eligible for free or reduced-price lunch. A breakfast program is offered to all students free of charge. In addition, GBCS provides no-cost weekend backpacks of food to nearly half of the student population through a privately funded program. In 2015, 170 students out of 396 students in the school participated in the backpack program. Students may also receive snacks in GBCS's afterschool programs.

GBCS hosts Family Learning nights approximately four times per week, in which children and parents participate in education enrichment activities and receive free dinner. During the learning nights, adults and children participate in workshops or a series of classes. This program, made possible through Title I / No Child Left Behind funding, has been in place since 2012 and provides free dinner for approximately 15-30 children and 10-20 adults on four weeknights. The program is available to students of Greater Brunswick Charter School, their parents, and other community members who are interested in participating in the learning activities.

The Charter school incorporates meals into evening activities "because many of our families work multiple jobs and/or don't have enough food at home. Originally, many parents were not able to attend because they had to cook or find other ways to feed their children; this was a common problem among our parents" (A. Perez, personal communication). Over time they modified the program to provide childcare and they moved the start time later so that people could get home from work and get their children settled.

Programs for Children on Weekends and in the Summer

While federal nutrition programs provide opportunities for children to obtain healthy food during school, several community efforts ensure that youth have access to, and knowledge of, nutritious food on weekends and over the summer. School gardens give children and youth the opportunity to grow and taste food they have grown. Backpack programs help students and their families stay hunger free on the weekends.

Community FoodBank of New Jersey Weekend Backpack Program

The Community FoodBank of New Jersey is a member of Feeding America, a nonprofit national association of food banks that secures food through donations from grocery distributors, government agencies, and individuals. Participating schools pick up food packages from regional food banks and distribute them to children so that they and their families have access to food over the weekend. Students at participating schools are eligible to receive backpack foods if they qualify for free or reduced lunch. The foods are mainly non-perishables and often do not require cooking (Community FoodBank of New Jersey, 2015). This program is being phased out.

Summer Nutrition

The New Brunswick government has made it a priority to ensure that students do not go hungry over the summer. With funding from the Summer Food Service Program (SFSP), the city provided breakfast and lunch to approximately 2,000 youth age 18 and under who attended city sponsored activities in 2014. The program provided summer meals in 23 locations in 2015 and it was expected that there would be as many as 41 locations in the summer 2016 program. Enrolled sites provide free meals to all children enrolled in the program and receive federal reimbursements. All summer meals adhere to the USDA guidelines detailed in the National School Lunch Program description and can be prepared on site or pre-purchased from a licensed vendor (State of NJDOA, 2014; USDA, 2015 January).

Interviewees mentioned a few challenges in reaching all students. First, many children and youth in New Brunswick do not participate in summer programs, which means that they do not have access to this program. In New Jersey, the latest participation data from 2010 shows that out of the total number of children eligible for SFSP free summer meals — 487,000 — only 44,000, or 9%, of eligible children received such meals. Although the numbers of children who participated in summer programs in 2016 was not known at the time of this writing, the numbers were expected to exceed those in 2015, likely more than 2,000 meals per day. There are many reasons that participation is lower than 100%. One is that few children were involved in summer programs (USDA FNS, 2010). Another is that not all children are excited to eat the food that is provided. Some summer programs also receive food from Rutgers Against Hunger which provides nutritious snacks for program participants over the summer. They delivered 5,000 snacks the first week and then 2,000 snacks in subsequent weeks during the summer of 2016.

Programs for Adult Individuals and Families

The Supplemental Nutrition Assistance Program (SNAP) is the largest nutrition assistance program in the U.S. and supports Americans across the lifespan. The Special Supplemental Nutrition Program for Women, Infants and Children (WIC) is a smaller program that provides support to families with young children. In this section, we provide an overview of SNAP and WIC program objectives, rules, organization, and implementation in New Jersey. It is difficult to learn about program usage because of a lack of publicly available data.

NJ Supplemental Nutrition Assistance Program (SNAP)

The Supplemental Nutrition Assistance Program (SNAP) is the largest federal food assistance program, and it was formerly known as the Food Stamp Program. This means-tested assistance to citizens and some non-citizens allows them to purchase certain types of food at designated food stores. As of 2014, New Jersey households with a gross monthly income of \$3,677 or less for a family of four and that meets other requirements could qualify for SNAP benefits (NJ SNAP website). To demonstrate that they qualify, New Jersey applicants "submit documents to prove citizenship, residency, income, and expenses. To continue in the program, participants are typically required to recertify every 6 to 12 months" (USDA OIG, 2012).

Recipients use an electronic benefit transfer card to purchase "eligible" food such as dairy products, bread, cereal, produce, fish, poultry, seeds and plants that food recipients will eat. In some areas, people who are homeless, elderly, or disabled may also use SNAP benefits to purchase meals. The Food and Nutrition Act of 2008 added some additional foods, besides cooked foods and other things, that people cannot use SNAP benefits to purchase, such as candy, cookies, ice cream, and soda (USDA SNAP Eligible Food items).

Stores are eligible to participate if they meet a few criteria, including offering certain foods continually with a certain amount of variety in each category or more than half of the dollar amount of their retail sales is for food that meets the SNAP eligibility rules (USDA Retail Store Eligibility). SNAP is administered through the state of New Jersey and county governments. Potential recipients can apply in person through their county welfare offices, send an application by mail or fax, or apply online. In NJ, people who meet the screening requirements conduct an in-person interview with the county, and if they are unable to get to the office because of illness or disability, someone can represent them to complete their application (NJ SNAP, nd).

SNAP Use

While it is possible to gather SNAP use for states and Congressional Districts, it is harder to find information for counties and municipalities. In general, since the mid 1990s the number of SNAP participants dropped because of a shift in 1996 with the Temporary Assistance for Needy Families program, which tightened benefit rules in reality and perception. Rules were subsequently loosened over time and clarified and, while the number of participants grew, it was only as the 2008 financial crisis unfolded that participant numbers increased. In New Jersey, 883,434 people participated monthly in FY 2014. The average monthly benefit per person was \$121.75 and per household, \$244.62 (USDA FNS, 2015d). In Middlesex County, 43,315 people received SNAP benefits of approximately \$138 per person per month in 2010 (Kirk, 2013). The number of children who use SNAP benefits in the county dropped by about half between 1996 (12,923 children) and 2000 (5,131), and then increased gradually until 2008 when the number rose to 26,068 in 2013 (Kids Count Data Center, 2015). In New Brunswick, 3,544 households or 7,634 people received NJ SNAP benefits in February 2015 (Palmer, 2015). We discuss SNAP use among seniors below.

Special Supplemental Nutrition Program for Women, Infants and Children

The federal Special Supplemental Nutrition Program for Women, Infants and Children (WIC) gives grants to states to provide food and nutrition assistance (and other services) to low-income women and children who are determined to be at nutrition risk. The program provides supplemental food for women who are pregnant, nursing, and after birth and for children up to age five.

New Jersey's program provides participants with a cash value voucher that they can use at designated stores and farmers markets. Women receive \$10 per month and each child aged two to five receives \$8 dollars. When that money is spent at a farmers market, women receive vouchers for \$20 per woman and \$20 for each child. New Jersey allows WIC vouchers to be used for the following foods (with a few restrictions): milk, 100% juice, eggs, whole grain cereal, cheese, peanut butter, dried legumes, whole grain bread, brown rice or whole wheat tortillas, fruit and vegetables, canned fish, tofu, soy beverage, infant cereal, baby food, and infant formula (NJ WIC). The WIC program was revised in 2014 to increase the ability of participants to buy fresh produce, whole grains, and yogurt, and to provide state and local governments with greater flexibility to meet the needs of their population (USDA, 2014; USDA, WIC). To qualify, participants must fall within the income guidelines, reside in New Jersey, and have a health professional certify that they are at nutrition risk. The New Jersey Department of Health and Seniors Services manages New Jersey's WIC program and the local WIC office in New Brunswick is on How Lane, nearly on the city's border and requires that many recipients drive or take taxis or the bus to reach it.

The WIC program incorporates nutrition education to improve dietary habits with the objective of improving birth outcomes and healthy lifestyles to reduce disease. This includes supporting and encouraging breastfeeding. WIC is a cost-effective program because it reduces the risk of chronic disease, reduces future healthcare costs and directs funding to local farmers. And in New Jersey in 2014, 230 farmers sold \$428,250 worth of produce to WIC participants (NJDOH, 2015).

Programs for Seniors

The federal government provides nutrition supports and services for seniors aged 60 years of age and older. As we mention above, SNAP is the largest of these. Other programs are available only to seniors, such as the Senior Farmers Market Nutrition Program (SFMNP), the Commodity Supplemental Food Program, and nutrition programs authorized under Title IIIC of the Older Americans Act, which include congregate senior meals and home delivered meals programs (HDM programs, often called "meals on wheels"). Each of these programs and its administration and use in New Brunswick is presented in Table 3 and discussed below.

Table 3. Federal Food Programs for Seniors: Descriptions, Eligibility and Rules

Federal Food Programs for Seniors	Purpose	Income Eligibility	Age Eligibility	Implementing Agencies	Time of Day Food Can Be Served
SNAP	Provides supplemental money designated for allowable foods	~Monthly cash income ≤130% of the federal poverty line and asset rules	NA	USDA	N/A
Commodity Supplemental Food Program	Provides supplemental food in the form of USDA supplemental products	≤130% Federal poverty line	≥60 and older	USDA	N/A
Senior Farmers Market Nutrition Program (SFMNP)	Provides vouchers to be spent only at farmers markets	≤185% Federal poverty line	≥60 and older	USDA	N/A
Congregate Meals	Provides free prepared lunch to be eaten on site.	NA	≥60 and older	USDA	Lunch only
Home Delivered Meals	Provides free prepared meals, delivered to the home	NA	18 and younger	USDA and private	Varies by program

Seniors and SNAP

Even though many seniors 60 and over are eligible for SNAP, the SNAP senior enrollment rate is low. About a third (34%) of the 144,000 elderly individuals estimated to be eligible for SNAP in New Jersey participate (Cunnyngham, 2010). This is less than half of the participation rate of the overall population of individuals eligible for SNAP, which is 72% (Leftin, Eslami, & Strayer, 2011).

Unfortunately, due to a lack of data, we cannot estimate the number of seniors in New Brunswick who receive SNAP, nor the number eligible. To better understand the lower SNAP enrollment rates among homebound seniors, and to explore ways to increase enrollment, Rutgers researchers Cara Cuite and Meera Dhawan partnered with Shareka Fitz from Meals on Wheels in Greater New Brunswick (MOWGNB) to conduct a demonstration project during the 2012-2013 academic year (Cuite, Dhawan, and Fitz, 2013). Researchers conducted interviews with 20 MOWGNB clients, and asked about their awareness of SNAP and potential barriers to enrollment. Most of the clients reported never having heard of "SNAP" or the "Supplemental Nutrition Assistance Program," including many of those who were enrolled in it. However, all clients were familiar with the Food Stamp program, and referred to SNAP as Food Stamps in conversation. They did not perceive much social stigma associated with receiving the benefits, although the theme of self-reliance came up in many interviews. Clients expressed some uncertainty about whether it was possible to receive both Meals on Wheels and SNAP (it is), and some believed that they might have to pay back any SNAP money they received (they would not). Many did not realize that SNAP applications could be completed without going to the office. Most clients do not do their own shopping, and most, but not all, have someone they would trust with a SNAP Electronic Benefit Transfer card to redeem SNAP on their behalf.

As part of this SNAP research project, interested MOWGNB clients were screened and almost all were found to be eligible for SNAP benefits using an online screening system (85%, or 11 of 13 screened). Two clients who asked to be screened were already receiving SNAP benefits but did not realize it, and thus

were not using the money deposited into their SNAP account. As a result of the project, MOWGNB changed its screening protocol to include questions about SNAP enrollment, so that it can better identify potentially interested and SNAP-eligible clients.

The Commodity Supplemental Food Program

The Commodity Supplemental Food Program (CSFP) is designed to improve the health of low-income seniors (60 years and older) by supplementing their diets with commodity foods. While this program was once available to low-income women and children, it is currently (as of 2015) only available to seniors. The USDA provides the food for this program. Commodity food packages may include dairy, grains, nut butters, dried beans, and canned foods, including meats, poultry, fish, fruits and vegetables. What is distributed varies monthly and the foods are pre-packed and distributed to eligible seniors monthly. The program is run in 46 states, and seniors are required to reapply monthly to receive benefits. Eligibility requirements in New Jersey include New Jersey residence and income at or below 130% of the Federal Poverty Income Guidelines. Applicants must provide proof of identity, age, residency, and income.

In New Jersey, 3,016 seniors receive monthly food boxes through CSFP (J. Cherry, personal communication, September 14, 2015). CSFP is administered through three food banks: The Community FoodBank of New Jersey in Hillside, the Food Bank of Monmouth and Ocean Counties in Neptune, and the Food Bank of South Jersey in Pennsauken. The Community FoodBank of NJ, which serves New Brunswick, distributes 1,949 boxes to 38 senior programs, but none are in New Brunswick or other Middlesex County municipalities. The Community FoodBank chooses counties and sites based on the percentage of seniors living in poverty, and while the program has expanded over the six years Community FoodBank of New Jersey has administered it, it has not yet expanded to New Brunswick, and there is no timeline for when it might.

Senior Farmers Market Nutrition Program

The Senior Farmers Market Nutrition Program (SFMNP) is a USDA program to increase fruit and vegetable consumption among eligible seniors (aged 60 and over) by providing four \$5 coupons per year (for an annual total of \$20) for use at qualifying farmers markets. Seniors with income at or below 185% of the poverty line are eligible. The Middlesex County Office of Aging and Disabled Services (MCOADS) enrolled 225 New Brunswick seniors in this program and distributed 900 vouchers (four vouchers per person) in 2015. One challenge is that seniors can only apply for SFMNP at the New Brunswick Resource Center and three senior buildings in the city. Seniors with limited mobility may have a difficult time signing up for and then using the vouchers at markets.

Rutgers researchers conducted a demonstration project in 2014 to increase fresh produce access and consumption among New Brunswick's and Highland Park's homebound elderly (Ismail and Cuite, 2015). The researchers conducted individual home-based SFMNP enrollment for eligible homebound seniors who receive home delivered meals through Meals on Wheels in Greater New Brunswick, followed by delivery of fresh produce to the homes. After registering eligible seniors in the program, volunteers delivered pre-packed bags of produce along with the regular meals on four dates in the summer. Even though the seniors liked the program, and many said that their fruit and vegetable intake increased, because the SFMNP enrollment process was very labor-intensive, it was too difficult to conduct enrollment outside of the four designated sites and the enrollment project will not be continued. However, the New Brunswick Community Farmers Market still donates fresh produce to Meals on Wheels clients in Greater New Brunswick, and home delivery of fresh produce to all clients has continued and is now in its third year.

Older Americans Act Title IIIC Feeding Programs

The Older Americans Act (OAA) was passed 50 years ago to provide social and nutrition services for seniors, which includes congregate and home delivered meals. Congregate meals are eaten in a central location such as a senior citizens center. Home delivered meals (HDMs) are delivered to homebound seniors who cannot access congregate meals. The frequency and types of meals vary by program. All programs funded by Title III of the OAA are provided for free, but individuals must be offered the opportunity to contribute to the cost of the services. Middlesex County residents aged 60 and over can receive congregate meals and HDMs. To receive the benefits, participants fill out an application. No proof of age or residency is required, so that all senior residents, including those who are undocumented, are eligible. Middlesex County Office of Aging and Disability Services (MCOADS) and smaller providers contracted by the County provide the meals.

Home Delivered Meals

Home Delivered Meals provide food and social contact for individuals who may not see anyone during their day-to-day lives. These programs often make it possible for seniors to live in their homes and maintain their independence. HDM programs tend to serve the most vulnerable seniors. A recent study funded by the AARP Foundation and Meals on Wheels America, and conducted by researchers at the Brown University School of Public Health, compared seniors on waiting lists for HDM programs with the larger senior population. They found that although many seniors face problems associated with aging, seniors who apply for home-delivered meals have higher rates of nutritional deficits, physical ailments, and emotional problems (Thomas and Dosa, 2015).

MCOADS provides HDMs to clients in Middlesex County. Approximately ten years ago, the Middlesex County Freeholders decided that all eligible Middlesex County residents who request HDMs must receive them, and therefore the Office is not permitted to have a waiting list. In New Brunswick, MCOADS provides meals directly to some residents, and it also contracts with two private organizations in New Brunswick to deliver meals to New Brunswick residents. In 2014, MCOADS directly provided 14,376 HDMs (lunch only) to 84 unique clients and 2,697 weekend meals to 82 unique clients in New Brunswick. Weekend frozen meals are delivered on Fridays to those clients who request them. The suggested donation for these meals is \$2.75 per meal. Although it is not possible to break these numbers out for New Brunswick, the best estimate available is that no more than 20% of New Brunswick residents contribute to these meals.

One of the groups MCOADS contracts with to provide HDMs is Meals on Wheels in Greater New Brunswick (MOWGNB), a non-profit organization that has been serving homebound seniors in New Brunswick and Highland Park for more than 40 years. They deliver two meals per day, five days per week. In 2014, MOWGNB served 20,756 meals (hot lunch and cold dinner) to 62 unique clients in New Brunswick. MOWGNB is a unique HDM provider, as it capitalizes on synergies with other non-profits that serve different disadvantaged populations in the area. For example, MOWGNB purchases its meals from Elijah's Promise, and in so doing, provides financial support and job opportunities for the Promise Culinary School, a non-profit that uses food to break the cycle of poverty, alleviate hunger, and change lives. Similarly, MOWGNB provides opportunities for developmentally disabled adults to gain skills and interact with others by volunteering to deliver meals. Approximately 42 developmentally disabled adults from local non-profit agencies deliver meals and interact with clients weekly.

The second program MCOADS partners with is Jewish Family Services (JFS), and their HDM program is called Kosher Meals on Wheels. It provides Kosher, nutritionally appropriate meals to homebound seniors. While available to New Brunswick residents, none are enrolled in this program. In the 12

years the program has been running, they have only had three or four New Brunswick residents enrolled. JFS also provides a Kosher food pantry as well as other non-food related services for seniors in Middlesex County, though few New Brunswick residents use these services.

Pantry Home Delivery

While many homebound seniors may need assistance from food pantries, they are unable to access it because of limited mobility. Currently, Five Loaves food pantry delivers food monthly to 125 aging adults who live Saint Mary's apartments, a federally assisted project-based Section 8 housing project, on Remsen Avenue and Talmadge Street in New Brunswick. A similar pilot project is underway through a partnership between MOWGNB and St. Vincent pantry. This pilot will enroll a small number of MOWGNB clients as St. Vincent's food pantry clients, and Meals on Wheels volunteer drivers will deliver the pantry bags to clients biweekly.

Conclusion

As New Brunswick continues to undergo a demographic transformation, local organizations are tasked with meeting changing community needs relating to food access. As shown throughout this report, there are many nutritional assistance programs available to children in New Brunswick, especially through the public schools. The public schools have been innovating and trying to create new programs such as Breakfast After the Bell to increase the number of children they are feeding. However, many New Brunswick children remain food insecure. This may be caused in part by factors such as misunderstandings about eligibility for programs, language barriers, and a lack of funding on behalf of food assistance organizations.

WIC serves many New Brunswick women and children, and provides nutrition education and other services. SNAP is a program that successfully serves a much broader population, including seniors, but recent changes to requirements for the benefits threaten the food security of many who rely on SNAP.

There are many nutrition assistance programs available to seniors in New Brunswick, some based on financial need (SNAP, SFMNP), some based on physical needs (HDMs), and others based on age (e.g., congregate meals). There is evidence that many seniors do not receive all the programs that are available to them, likely because of a combination of a lack of awareness and barriers to applying, enrolling, and using the resources. Based on the available data, it is not possible to quantify the number of food insecure seniors in New Brunswick. Similarly, it is not possible to quantify the exact number in need of, eligible for, or receiving the available nutrition programs. SNAP enrollment data is not available. While we know the number of New Brunswick seniors receiving SFMNP (225), congregate meals (127 unique recipients) and home delivered meals (from the County: 84 unique recipients, from MOWGNB: 62 unique recipients) we cannot be certain these individuals are unique from one another. That is because, while no senior can receive meals from more than one of these sources at one time, it is possible that over the course of the year, an individual used all three, and thus was counted three times. So, while this paper has described the many available programs, and in many cases, the number of participants, we still are not able to draw a clear picture of who is using what services.

Looking to the future, we see an important new nutrition program that is on the horizon for seniors in New Brunswick and across the country. USDA Secretary Tom Vilsack announced that the USDA will be supporting home delivery of groceries to homebound seniors enrolled in SNAP. When a sample of New Brunswick seniors were asked about interest in a similar program, respondents uniformly expressed interest

in enrolling in no-cost home delivery of groceries (Cuite, Dhawan, and Fitz, 2013). This could have a profound effect on the food security of homebound low-income seniors in New Brunswick.

As the population in New Brunswick continues to increase, having well organized nutritional support programs available for residents of all ages will be crucial to a healthier New Brunswick overall.

Ideas for the Future

School, Summer and Afterschool Food Programs

Though federal food greatly helps children and youth get food, there are many questions about how these programs are implemented and how they address food security among children and youth. These questions include:

- Do students who qualify for these programs use them and, if they do not, why not?
- What foods are children served, what do they eat and not eat, and what is thrown away?
- Are federal or state food resources used to their fullest?
- In what additional ways can these programs be changed to further improve food security within these populations?

Some community leaders mentioned that children in the Recreation Summer program that runs for 4-5 weeks receive breakfast, lunch, and sometimes snacks. While this program expands access for some school age children and youth, it does not provide food for siblings who are too young or old and it provides food for about half the summer. Future research might explore how other school districts and municipalities expand on these programs to provide food to more children and youth throughout the summer.

Some community leaders also mentioned that there is a need for healthy snack programs for high school students who participate in programs outside of the public school programs. There are a few opportunities for students to participate in innovative after school programs such as one at Middlesex County College but their participation in these programs removes them from the school and therefore access to the afternoon snack programs.

SNAP and Meals on Wheels

Interviewees expressed confusion about being able to receive Meals on Wheels and SNAP at the same time. Many interviewees were not aware that they could use both programs, and or were fearful that their benefits could be diminished if they used both programs. Providing additional education about how these programs can be used together could help the people who use them.

References

Acelero Learning - Monmouth/Middlesex. (2015). *Our center*. Retrieved from http://almm.acelero.net/our- centers.

Advocates for Children of New Jersey. (2016). *Healthy food, strong kids: Building a community response to childhood hunger.* Retrieved from https://acnj.org/6th-annual-child-nutrition-report/

Aussenberg, Randy and Kirsten Colello. (2015). *Domestic food assistance: Summary of programs*. Congressional Research Service. Retrieved from https://www.fas.org/sgp/crs/misc/R42353.pdf

Benefits.gov. (2015). *New Jersey Head Start*. Retrieved from http://www.benefits.gov/benefits/benefits-details/1926.

Bradshaw, Jennifer. (2014). Supping in the summertime – 15,000 city children receive daily meals through food service program. The City Of New Brunswick. Retrieved from http://thecityofnewbrunswick.org/blog/2014/08/01/supping-in-the-summertime-15000-city-children-receive-daily-meals-tough-food-service-program

Community FoodBank of New Jersey. (2015). Retrieved from https://www.google.com/maps/d/viewer?mid=zUScgQvajkuM.k_E9sN7h0K6U&hl=en

Cuite, Cara, Meera Dhawan, and Shareka Fitz. (2013). Increasing food security for homebound elderly in New Brunswick. Retrieved from http://humeco.rutgers.edu/documents_pdf/news/snapreport.pdf

Cunnyngham, Karen. (2010). State trends in Supplemental Nutrition Assistance Program eligibility and participation among elderly individuals. Washington, DC: Mathematica Policy Research, Inc. Retrieved from: http://www.mathematica-mpr.com/publications/PDFs/nutrition/SNAP_elderly.pdf

Food Research & Action Center (FRAC). (2015). *Afterschool Nutrition Programs*. Retrieved from http://frac.org/federal-foodnutrition-programs/afterschool-programs

Ismail, Mehreen, and Cara Cuite. (2015). Farm to home: Senior Farmers Market Nutrition Program access and fresh fruit and vegetable home delivery for homebound older adults. Paper presented at Feeding Cities: Ethical and Policy Issues in Urban Food Systems, Boston, MA.

Kids Count Data Center. (2015). Children Receiving New Jersey SNAP data. Data provided to Kids Count by Advocates for Children of New Jersey, which accessed the data from the New Jersey Department of Human Services Division of Family Development. Data are from June of year calendar year.

Kirk, Chris. (2013). How many people around you receive food stamps? *Slate*. http://www.slate.com/articles/news_and_politics/map_of_the_week/2013/04/food_stamp_recipients_by_county_an_interactive_tool_showing_local_snap_data.html

Leftin, Joshua, Esa Eslami, and Mark Strayer. (2011). Trends in Supplemental Nutrition Assistance Program participation rates: Fiscal year 2002 to fiscal year 2009. Alexandria, VA: U.S. Department of Agriculture, Food and Nutrition Service. Retrieved from http://www.fns.usda.gov/ora/MENU/Published/snap/SNAPPartNational.html

New Jersey Anti-Hunger Coalition- NJAHC. (2016). History of NJAHC. Retrieved from http://www.njahc.org/index.php/who-we-are/history-njahc/

New Jersey School Age Care Coalition (NJSACC) The Statewide Network for New Jersey's Afterschool Communities. (2013). On the ground with at-risk meals. Retrieved from http://www.njsacc.org/providers/yes_profile_2013_2.pdf

Puerto Rican Action Board. (2015). Early childhood. Retrieved from https://prab.org/programs-services/early-childhood

State of New Jersey, Department of Agriculture. (2012). New Jersey Fresh Fruit Program. Retrieved from http://www.state.nj.us/agriculture/divisions/fn/pdf/ 2011-2012ffvschools.pdf

State of New Jersey, Department of Agriculture. (2014). Summer Food Service Program. Retrieved from http://www.nj.gov/agriculture/divisions/fn/childadult/summer_food.html

State of New Jersey, Department of Agriculture. (2015a). *After School Snack Program*. Retrieved from http://www.nj.gov/agriculture/divisions/fn/childadult/school_snack.html

State of New Jersey, Department of Agriculture. (2015b). *Child and Adult Care Food Program*. Retrieved from http://www.nj.gov/agriculture/divisions/fn/childadult/food_prog_facts.html

State of New Jersey, Department of Agriculture. (2015c). Fresh Fruit and Vegetable Program. Retrieved from http://www.nj.gov/agriculture/divisions/fn/childadult/ fruitandvegetable.html

State of New Jersey, Department of Agriculture. (2015d). Reimbursement rates. Retrieved from http://www.nj.gov/agriculture/divisions/fn/childadult/school_rates.html

State of New Jersey, Department of Health. (2015). Special Supplemental Nutrition Program for Women, Infants and Children (WIC) FFY Draft 2016 State Strategic Plan. DUNS #806418075. Trenton, NJ. Retrieved from http://www.state.nj.us/health/fhs/documents/ffy16_wic_state_plan.pdf

State of New Jersey Department of Human Services, Supplementary Nutrition Assistance Program. (n.d.). Retrieved from http://www.nj.gov/humanservices/dfd/programs/njsnap/

Thomas, Kali, and David Dosa. (2015). Results from a pilot randomized control trial of home-delivered meal programs. Retrieved from http://www.coconino.az.gov/DocumentCenter/View/9272

Thomas, Lakeesha. (2014). New School Breakfast Program Expanding to Serve More Than 5,000 New Brunswick Students. *New Brunswick Today*. Retrieved from http://newbrunswicktoday.com/article/new-school-breakfast-program-expanding-serve-more-5000-new-brunswick-students

United States Department of Agriculture (2016). Community Eligibility Provision: Planning and implementation guidance. Retrieved from http://www.fns.usda.gov/sites/default/files/cn/SP22-2016a.pdf

United States Department of Agriculture, Food and Nutrition Service. (2010). Reaching more New Jersey Children. Retrieved from http://www.fns.usda.gov/sites/default/files/SFSP-rates- New_Jersey.pdf

United States Department of Agriculture, Food and Nutrition Service. (2011). Supplemental Nutrition Assistance Program. Guidance on Non-Citizen Eligibility. Retrieved from http://www.fns.usda.gov/sites/default/files/Non-Citizen_Guidance_063011.pdf

United States Department of Agriculture, Food and Nutrition Service. (2012). *Nutrition Standards in the National School Lunch and School Breakfast Programs*; Final Rule. (Vol. 77 No.17). Retrieved from http://www.gpo.gov/fdsys/pkg/FR-2012-01-26/pdf/2012-1010.pdf

United States Department of Agriculture, Food and Nutrition Service. (2013). *Child Nutrition Programs; Income Eligibility Guidelines*.

United States Department of Agriculture, Food and Nutrition Service. (2014). TEFAP Frequently Asked Questions. Retrieved from http://www.fns.usda.gov/tefap/frequently-asked-questions.

United States Department of Agriculture, Food and Nutrition Service. (2015a). Commodity Supplemental Food Program (CSFP). Retrieved from http://www.fns.usda.gov/csfp/commodity-supplemental-food-program-csfp

United States Department of Agriculture, Food and Nutrition Service. (2015b). Community Eligibility Provision: Guidance and Updated Q&As. Retrieved from http://www.fns.usda.gov/sites/default/files/cn/SP19-2016os.pdf

United States Department of Agriculture, Food and Nutrition Service. (2015c). *National School Lunch Program: Applying for Free and Reduced Price School Meals*. Retrieved from http://www.fns.usda.gov/school-meals/applying -free-and-reduced-price -school-meals

United States Department of Agriculture, Food and Nutrition Service. (2015d). Supplemental Nutrition Assistance Program State Activity Report, Fiscal Year 2014. Retrieved from http://www.fns.usda.gov/sites/default/files/FY14%20State%20Activity%20Report.pdf

United States Department of Agriculture, Food and Nutrition Service. (2016a). Supplemental Nutrition Assistance Program Eligible Food Items. Retrieved from http://www.fns.usda.gov/snap/eligible-food-items

United States Department of Agriculture, Food and Nutrition Service. (2016b). Supplemental Nutrition Assistance Program Retail Store Eligibility. Retrieved from http://www.fns.usda.gov/snap/retail-store-eligibility-usda-supplemental-nutrition-assistance-program

United States Department of Agriculture, Food and Nutrition Service. (2016c). WIC program website. Retrieved from http://www.fns.usda.gov/wic/about-wic-wics-mission

United States Department of Agriculture, Office of the Inspector General. (2012). Analysis of New Jersey's Supplemental Nutrition Assistance Program (SNAP) Eligibility Data. Audit Report 27002-0009-13. Retrieved from http://www.usda.gov/oig/webdocs/27002-0009-13.pdf

United States Department of Education, National Center for Education Statistics. (2014). *Common Core of Data*. Retrieved from http://nces.ed.gov/ccd

United States Department of Education, National Center for Education Statistics. (2015). Number and percentage of public school students eligible for free or reduced-price lunch, by state: Selected years, 2000-01 through 2012-13. Retrieved from https://nces.ed.gov/programs/digest/d14/tables/dt 14_204.10.asp

Appendix A. Additional Tables

Table 1. Summer Food Program Sites in New Brunswick, 2014

Feeding Site Facilities	Location
CHARTER SCHOOL	429 JOYCE KILMER AVENUE
CHURCH OF ST JOHN	189 GEORGE STREET
AMAR/RWJUH	DOUGLASS COLLEGE DINING HALL
KATE'S KIDS HERITAGE	178 RYDERS LANE
ALEX BAKER PARK	REMSEN AVE-ELLEN STREET
CIVIC LEAGUE	165 BAYARD STREET
MURPHY PARK/WOODROW WILSON	133 TUNISON ROAD
NEW BRUNS YOUTH SVC	BUCCLEUCH PARK
NBT/PRAB	EASTON AVE/HUNTINGTON PARK. & BUCCLEUCH PK
SALVATION ARMY NEW BRUNSWICK	287 HANDY STREET
LIVINGSTON SCHOOL	206 DELAVAN STREET
MEMORIAL STADIUM	JOYCE KILMER AVENUE
YOUTH EMPOWERMENT SERVICES	1 JOHN STREET
JOYCE KILMER PARK	JOYCE KILMER AVENUE/ DELAVAN STREET
MCKINLEY SCHOOL	35 VAN DYKE AVENUE
LORD STIRLING SCHOOL	101 REDMOND STREET
HUB TEEN CENTER	411 JOYCE KILMER AVENUE
FEASTER PARK	COMMERCIAL AVE. & HALE ST.
CATHOLIC CHARITIES	115 COMMERCIAL AVENUE
BUCCLEUCH PARK	HUNTINGTON & EASTON STREET
PRESBYTERIAN CHURCH	100 LIVINGSTON AVENUE
FAITH HOPE BAPTIST CHURCH	40 GEORGES ROAD
CIVIC LEAGUE NBHS	1000 SOMERSET STREET
CIVIC LEAGUE	199 COMMERCIAL AVENUE
AC REDSHAW SCHOOL	40 VAN DYKE AVENUE

NJDOA, 2014

Table 2. Income Eligibility Thresholds for Free/Reduced Lunch, 2013-14

	Free	Reduced
Base	\$14,937	\$21,257
Each additional person	\$5,226	\$7,437
Family of 3	\$25,389	\$36,131
Family of 4	\$30,615	\$43,568
Family of 5	\$35,841	\$51,005

USDA Food and Nutrition Service, Income Eligibility Guidelines: Benefits.gov, 2015

Table 3. Students Eligible for the Free/Reduced Lunch Program by School, 2013-14

School Name	Free Lunch	Reduced Price Lunch	Total %
New Brunswick High	79%	7%	86%
New Brunswick Middle	88%	5%	93%
A Chester Redshaw	88%	5%	93%
Lincoln Elementary	86%	5%	90%
Livingston Elementary	83%	4%	87%
Lord Stirling Elementary	90%	2%	93%
McKinley Community	77%	6%	83%
Paul Robeson Community	76%	5%	81%
Roosevelt Elementary	86%	3%	88%
Woodrow Wilson Elementary	57%	13%	69%
New Brunswick District	82%	5%	88%

National Center for Education Statistics, Common Core of Data 2013-14, 2015

Chapter 6. Food Outlets in New Brunswick

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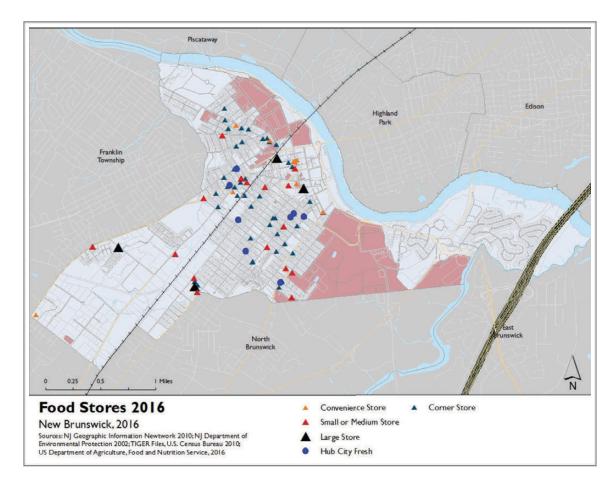
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New Brunswick residents can access food at a variety of corner stores, convenience stores, a range of different sized grocery stores, and at the New Brunswick Community Farmers Market. Food access has improved with the addition of a large grocery store downtown and an increase in the number of smaller supermarkets in some neighborhoods, but, even so, some residents find it difficult to access all the foods they want to buy at prices they can afford. In this paper, we discuss where residents can purchase food in New Brunswick, starting with retail stores and the New Brunswick Community Farmers Market. We then discuss community supported agriculture and present an overview of outlets that are authorized to accept federal SNAP and WIC benefits.

To better understand New Brunswick's food store landscape, we created a two-part project. First, we identified and mapped stores that sell food. To create the food store list, we combined three lists of food stores: a) those authorized to accept the federal assistance programs SNAP or WIC, b) those identified through the New Brunswick Hub City Fresh program (discussed below), and c) those on a list that the Rutgers State Health Policy Center created as part of a research project. After creating a master food store list, we searched for each store online and visited some to check names and to ensure that the stores are in business. This produced a list of 81 stores that sell food that includes: 51 corner stores; 8 convenience stores (such as gas stations and pharmacies); 15 small- and mid-sized supermarkets; and 4 large supermarkets (see the Food Stores map).

Grocery Stores

New Brunswick city government and the New Brunswick Development Corporation worked for years to enable a large grocery store to locate downtown. Unfortunately, the realization of their efforts in the Fresh Grocer supermarket were initially short lived as the store that opened in November 2012 closed shortly thereafter in May 2014. A Key Food supermarket subsequently opened in the space, and in January 2017, that store was renamed to SuperFresh, a subsidiary of Key Food. The store offers a diverse selection of fresh, frozen, and non-perishable products from around the world. As one interviewee, who was interviewed when Key Food still occupied the space, explained: "In the sense of access, it's pretty good in that we have a lot of supermarkets and the new one, Key Food, nothing you can't find there." Initially Key Food delivered food to shoppers' homes if they spent more than a set amount of money. It is unclear if SuperFresh still provides that service. In addition, a Bravo supermarket is located downtown on the edge of the Unity Square neighborhood and a Foodtown is located near the city's border with North Brunswick. An Aldi grocery store is located off Route 27 near Franklin Township.



While these grocery stores meet the needs of many residents, we heard from resident interviewees that they would like fresh, less expensive seafood and meat; spices and herbs (especially Mexican oregano; insects such as chapulines, chicatanas, and humiles; fresh fruit including cranberry, capulines, limes, guanabana, and passion fruit; fresh cheese, and fresher and more affordable vegetables such as broccoli, sweet peppers, nopale, vaina, cassava, plantains, avocado, and chilacayotes.

Corner Stores

While there are a few large grocery stores in New Brunswick, some people find it easier to shop at one or more of the city's more than 51 corner stores, located in residential neighborhoods often on small commercial corridors and at intersections. To learn more about those stores and their neighborhood context, the research team walked around 18 blocks in the Unity Square and Georges Road neighborhoods (see Figures 1 and 2). We surveyed signs on telephone poles, which residents use to communicate informally about housing, work, and other services, and we gathered information from external commercial storefronts about goods, services, and customer base by looking at store names and types, national flags, and signs advertising delivery, remittance, cell phone, and other services.

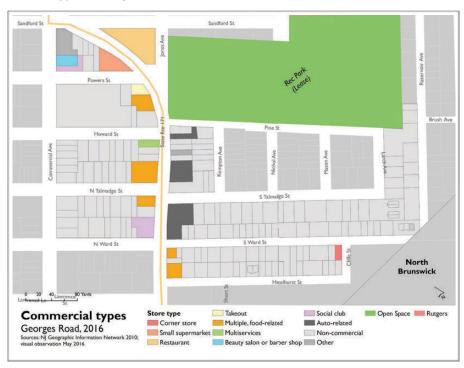
We found that the stores are woven into New Brunswick's communities through language, culture and community and act as transnational spaces in which people make connections within and outside of New Brunswick. The external store survey suggested many ways that the stores connect people in New Brunswick with each other and with people living elsewhere through communication services, remittances, airline tickets,

food and language. Many corner stores display flags and advertise ingredients and non-perishable products from countries in Central and South America. One interviewee described the corner stores as long-time community fixtures that welcomed them on their way home from school. Their families knew one another and the parents sent the children to the corner store to get last minute ingredients. "It's easy, you know, the owners, you feel comfortable, you can send your kids to pick up a few things; you're comfortable."



Figure 1. Commercial Types Unity Square 2015 and Georges Road, 2016

Figure 2. Commercial Types Georges Road, 2016



Though corner stores bridge neighborhood and transnational divides, many lack robust displays of fresh produce. The Hub City Fresh Healthy Corner Store Initiative, in partnership with a subset of corner stores, seeks to increase the availability of and access to fresh produce, healthier foods, and education/information about healthy eating in New Brunswick. This initiative is a partnership of the city of New Brunswick and the New Brunswick Community Food Alliance. Rutgers Professor Nurgul Fitzgerald leads the initiative, which has received funding from the USDA, The Food Trust, and Rutgers University. The partners define corner stores as small, locally owned food stores with one cash register.

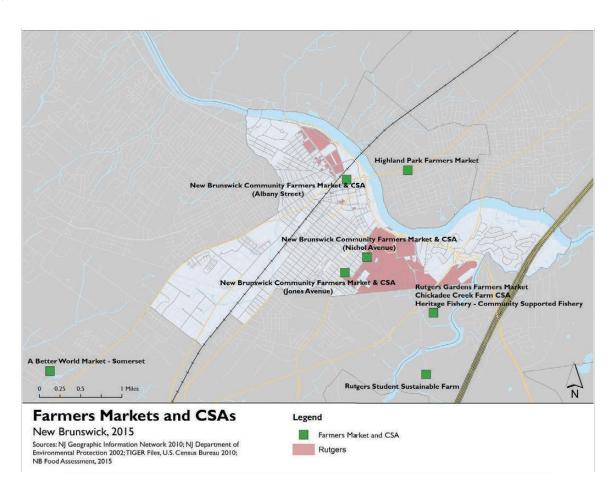
Using a community-based participatory research approach, the initiative's first phase included surveys with ten corner store owners/managers in February and March 2013. With the stakeholders' input, the team expanded the surveys and interviewed 35 store owners/managers in 2014. The team conducted an assessment of the food environment in 49 of the 51 existing food stores (excluding convenience stores) in early 2015. This assessment included 43 corner stores, 4 medium size grocery stores and 2 supermarkets (Fitzgerald and Ackerman 2014; Ackerman et al. 2015). The program's intervention phase started in 2015 with nine participating corner stores (Ramos et al. 2016). Hub City Fresh provides training materials for store owners, nutrition education and promotional materials, such as healthy recipes, posters, signage for shelving, display baskets for fresh produce, and branded kitchen utensils for store patrons who purchase healthier food items. The program collaborates with store owners in making gradual improvements to promote healthier foods. The program's current phase includes customer interviews, nutrition education activities, and measuring sales of healthier food items before and after the intervention (N. Fitzgerald, personal communication, 2016). Data about the effectiveness of this intervention are not yet available.

New Brunswick Community Farmers Market

The New Brunswick Community Farmers Market (NBCFM), a collaborative project of Rutgers Cooperative Extension, the city of New Brunswick, and Johnson & Johnson, was established in 2009 to improve access to fresh, local, healthy, affordable, and culturally familiar foods. The market is governed by an Executive Committee with representation from each collaborator, and is shaped by a community advisory group that includes New Brunswick residents (Lawson et al., 2016). CityMarket, which markets the downtown Special Improvement District, works with the New Brunswick Community Farmers Market to maintain a downtown market location which lends vibrancy to the area. The New Brunswick Community Farmers Market operates the market three days a week from June through October in two locations: downtown in Kilmer Square Park, located at the intersection of Albany and George Streets, and at 178 Jones Avenue, adjacent to Recreation Park. The market opens an additional day per week at a location near the Floriculture Greenhouses on Rutgers Cook Campus in September. The market averages approximately 12,000 guests annually and has experienced significant growth since its inception.

Pop's Farm Market, the New Brunswick Community Farmers Market's "backbone" vendor, sells fruits, vegetables, honey, jarred goods, and eggs. While much of the produce is grown on the farm, Pop's buys New Jersey and Pennsylvania grown produce and a few imported produce items to expand their offerings (in response to consumer demand). The New Brunswick Community Farmers Market buyback program ensures farmers market vendors sell a base amount of produce and increases the availability of fresh fruits and vegetables for emergency food assistance providers (food pantries and soup kitchens). The emergency food providers purchase produce from farm market vendors through a grant from Johnson & Johnson. Other vendors, including Elijah's Promise, sell items such as breads and other baked goods. The Rutgers Student Organic Farm started selling produce at the market in 2016. The market is currently working with community gardeners to increase the amount of locally grown produce.

The Jones Avenue market location, which sits at the intersection of predominantly Latino and African-American neighborhoods, offers several programs to encourage community involvement. While the market is currently in its ninth season, the complementary activities were developed more recently. At the Jones Avenue site, a community garden now includes two hoop houses, a greenhouse, and 40 raised garden beds. These gardeners grow fruits, vegetables, spices and herbs including those common in Latin cuisine including papalo, chipilin, aloe vera, and ruda. Hundreds of marigold flowers are also grown for sale and use in *Dia de los Muertos* (Day of the Dead) celebrations. Any resident may rent a garden bed to grow their own fruits, vegetables, herbs, and/or flowers for an annual fee of \$15. During warm months, a small flock of chickens is kept on site and used for egg production (shared among the community gardeners) and education. The market maintains a public Children's Garden for educational programming offered in conjunction with the New Brunswick FoodCorps service member. The market hosts many family-friendly events on site to engage residents, and there is interest in accepting RUExpress, the Rutgers student food plan payment system, at the market in the future.



Expanding Nutrition Assistance Program Dollars

To expand the ability of lower income residents to shop at the market, the New Brunswick Community Farmers Market accepts SNAP, WIC Farmers Market Nutrition Program Checks, and Senior Farmers Market Nutrition Program Checks (SFMNP). The market further increases the purchasing power of residents who use any form of federal nutrition assistance (WIC, SNAP, and SFMNP) through its "Market Bucks" program. Residents earn matching dollars in Market Bucks when they spend nutrition assistance benefits with market vendors. For example, a \$10 SNAP purchase earns \$10 in Market Bucks, a paper voucher system that works like cash with any farmers market vendor that sells fruits and vegetables. Guests can spend the bucks at the time of purchase or save them for later. In 2016, more than 85% of the Market Bucks distributed were redeemed (spent) with farm vendors. In some years, FoodCorps members also distributed Market Bucks to school children and their families: students in the All About Food Program at the New Brunswick Charter School received Market Bucks as rewards and to encourage them to visit the markets, and in 2017 Nurture thru Nature students participating in educational activities at the market received Market Bucks to spend on their choice of fruits and vegetables. In addition, volunteers and parents received \$5 in Market Bucks after a preschool garden to farmers market trip.

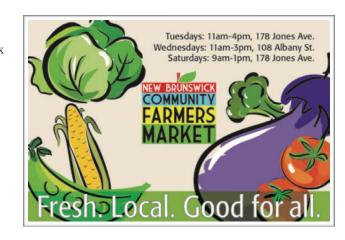
Figure 3. New Brunswick Community Farmers Market Advertisement



Population Served

Each market location draws a different mix of people. Frequent visitors to the downtown market include a mix of New Brunswick residents and downtown workers. Most SNAP and WIC use takes place at the Jones Avenue location. Weekday markets include more seniors, particularly because senior busses visit the market which accepts seniors' farmers market benefits.

The New Brunswick Community Farmers Market was created to expand access to fresh produce for underserved low-income residents. To



track the extent to which the market succeeds, market management operationalized the percentage of sales to low-income guests as the total sales to federal nutrition assistance users and Market Bucks redemption. This operationalization likely undercounts low-income guests, as many low-income shoppers are not enrolled in federal nutrition assistance programs. In addition, some are enrolled, but do not use the programs at the time of purchase. Sales to low-income guests are compared to cash and credit sales to determine the ratio of low-income guests. The percentage of sales to guests who used federal nutrition programs or Market Bucks varied over the last four years for which we have data: 51% in 2013, 46% in 2014, 67% in 2015, and 61% in 2016. These data demonstrate that the New Brunswick Community Farmers Market has been successful in engaging a largely low-income population.

Untapped Demand

The Esperanza project found that of the people who did not shop at the New Brunswick Community Farmers Market on Jones Ave, 71% did not know the market was there and 67% of people who did not shop at the downtown market were unaware of its existence (New Brunswick Tomorrow, n.d.). Many food pantry interviewees were also not aware of the New Brunswick Community Farmers Market or the Market Bucks program, including some who receive SNAP benefits. This suggests untapped potential farmers market demand and a need for continued outreach, especially given the significant number of new residents in New Brunswick every market season. The New Brunswick Community Farmers Market has been aware of the importance of outreach and continues to employ diverse and innovative strategies to increase awareness of the market throughout the community both by engaging in their own promotional efforts and by partnering with local service agencies, food pantries, and houses of worship to promote the market.

Community Supported Agriculture

Community supported agriculture (CSA) offers consumers a share in the risk of farming for the reward of freshly grown produce that may include hard-to-find food items or varieties. Several CSA pick-up locations are near New Brunswick. Two CSAs had operated within New Brunswick and are no longer operating. Elijah's Promise hosted a 24-week CSA with Starbrite farms during the 2013 and 2014 growing seasons. Participants paid on a sliding scale. Elijah's Promise's objective was to get people access to high quality low cost food based on their income level. People making less than \$25,000 paid a 10% deposit and a weekly charge of \$13.75. Those who made a little more paid \$15-25 a week. The CSA also offered a large one-time winter share for \$50. Elijah's Promise used uncollected produce in its other programs, ensuring little waste, and sold their own bread, which helped to fund their culinary training program (Voorhees Fellows,

2014; Voorhees Fellows, 2013). As recently as the 2016 season, Pop's Farm Market, in partnership with the New Brunswick Community Farmers Market, offered a box program which is like a CSA but without the shared risk. Vegetables were included from New Jersey farms and fruit from farms in Pennsylvania and Delaware. Pick-up was available at the New Brunswick Community Farmers Market.

Three other CSAs are located within a short driving distance of New Brunswick but are likely inaccessible to New Brunswick residents who lack reliable access to a vehicle or the ability to pay lump sum CSA costs. Efforts are underway to revitalize the program. The Chickadee Creek Farm maintains a "market-style CSA" at the Rutgers Farmers Market. Individuals pay a set amount at the beginning of the season and draw down on that credit as they purchase produce at the farmers market stand throughout the season. Chickadee provides a percentage discount which increases as the amount prepaid increases. A community supported fishery, run by Heritage Fishery, with the marine program of Rutgers Cooperative Extension of Ocean County, is accessible at the Rutgers NJAES Animal Care Farm Sales Program tent at the Rutgers Gardens Farmers market. The share costs \$250 per season, or \$25 for a week, and each week includes enough seafood for two people. Products have included sea scallops, Eventide Littlenecks, Tile fillet, lobster, oysters, and Middleneck Clams. All are sourced from fisheries in New Jersey and nearby states. Finally, the Rutgers Student Farm CSA is not currently operating, but it was run by Rutgers undergraduates and was located on a Rutgers research farm on Ryders Lane. Efforts are underway to revitalize the program.

SNAP and WIC

Some New Brunswick residents receive SNAP and or WIC food assistance benefits, which they can use at 54 New Brunswick vendors authorized to accept WIC in 2016. These vendors include larger stores such as SuperFresh, Aldi, and Bravo; the New Brunswick Community Farmers Market; small and medium sized grocery stores, gas stations; pharmacy chains; and corner stores (USDA FNS, 2015). SNAP recipients, including non-New Brunswick residents, spent \$10,520,649 in SNAP redemptions in New Brunswick stores in 2014. More than a quarter of the redemptions were at large grocery stores, 19% at medium grocery stores, 9% at small grocery stores, and 2% at convenience stores. Nearly 10% of the dollars were spent at small grocery stores, which reinforces their importance for food access.

Table 1. New Brunswick Store Overview, 2016

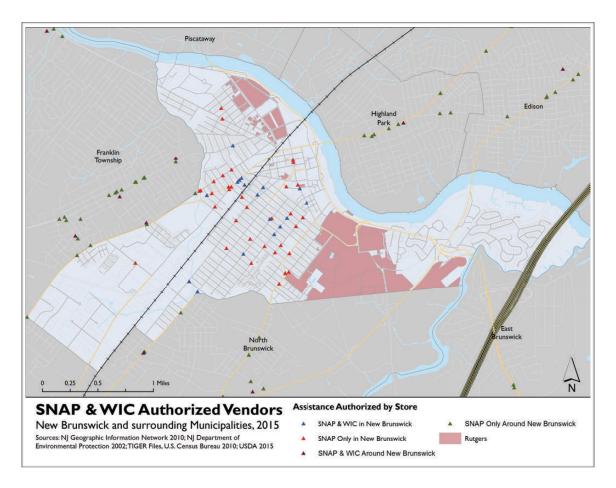
	Total	Accept WIC	Accept SNAP	Participate in Hub City Fresh
Food Stores	81	25	54	8

USDA Food and Nutrition Service, 2015

Neighborhood Location and Auto Access

While people with a car have a variety of shopping options, about a third of New Brunswick households do not have a vehicle (32% ±2%) (US Census Bureau, ACS 2009-2013, Table B08201). This makes access to mass transportation or the ability to walk to the store especially important. In census tracts 51, 60.02, and 60.01, there are high rates of vehicle access. In every other tract, there is either a larger grocery store (93, 55, 56.01) or one within a short ride on public transit. The MCAT M5 shuttle is the most convenient option for travel along Livingston Avenue; it comes once an hour for a suggested \$1 fare. A state-operated bus also operates along this route twice an hour with higher fares of \$1.60 for adults and \$0.75 for

seniors and children. Although the ride does not take long, shoppers might need to allocate extra time to get to the transit stop, travel, shop, and finish in time for the next shuttle. This process may be more complicated for those who are older, have disabilities, or care for small children.



Conclusion

Residents with cars and higher incomes can access food from stores in and out of New Brunswick, but those without cars shop nearby, take public transit, share rides or borrow cars. The ability to access fresh food has increased in the last few years for many New Brunswick residents, but many interviewees observed that they still found it challenging to access fresh food especially at prices that are affordable to them. Many interviewees emphasized that they would like greater access to very fresh affordable fish, meat and produce and some interviewees would like insects. Residents and non-residents use federal food assistance program dollars at New Brunswick supermarkets, corner stores and at the farmers market, which expands access for them and provides business for New Brunswick's food stores. That many people use federal food benefits at corner stores suggests the importance of corner stores for residents. The New Brunswick Community Farmers Market has diversified its programs, increased the availability of Market Bucks matching dollars, and is expanding outreach efforts. The city was home to two CSA programs but neither is currently functioning.

Ideas for the Future

Interviewees offered many ideas to further expand access to fresh food such as to:

Increase SNAP and WIC Use Among Those Who Qualify: Increasing SNAP and WIC enrollment and use by those who qualify can expand income and increase purchasing power. While not everyone would spend those dollars in New Brunswick, some would.

Expand Outreach at the New Brunswick Community Farmers Market: Some of the food pantry guests we interviewed were unfamiliar with the New Brunswick Community Farmers Market. The Market staff recognizes the importance of connecting with this population, and they continue to partner with the local food pantries to conduct outreach for the market and the Market Bucks program. Farmers Market staff distributes market information at the pantries, and regularly attends Feeding New Brunswick Network meetings to be sure that those who work in the pantries are familiar with the market and Market Bucks program. Placing flyers or postcards in food pantry bags at the beginning of market season may also help raise awareness among pantry clients.

At the 2016 Community Food Forum, participants suggested that the Farmers Market:

- Increase the diversity of fruits, vegetables, and herbs;
- Identify foods in multiple languages
- Educate consumers about foods that are unfamiliar; for example, use signs to illustrate how the food can be used such as: "if you don't have potatoes, use yucca," or "this is good in stews;"
- Increase access points for fresh produce such as by organizing pop-up markets at Chandler Health Center, at the WIC office/St. Peter's Clinic, and next to Suydam Street Reformed Church.

The New Brunswick Community Farmers Market is partnering with community organizations to develop pop-up markets and has increased the market staff capacity to include additional bilingual persons (including English, Spanish, and Mandarin speaking representatives) to better accommodate customers' diverse languages. Local vendors are likewise trailing additional produce varieties for the 2017 season and beyond.

References

Ackerman, Christopher, Ana Rosales, Elena Santiago, Rebecca Fink, and Nurgul Fitzgerald. (2015). Corner store owners' perspective on increasing access to healthy foods. Rutgers School of Public Health, MPH Fieldwork Report. New Brunswick, NJ.

Fitzgerald, Nurgul and Ackerman, Chris. (2014). Hub city Fresh Healthy Corner Store Initiative New Brunswick, NJ. Project Progress Summary. Retrieved from http://sj-site-persistent-prod.s3.amazonaws.com/fileadmin/cicbase/documents/2015/6/5/14335203002372.pdf

Lawson, Laura, Luke Drake, and Nurgul Fitzgerald. (2016). Foregrounding community building in community food security: A case study of the New Brunswick Community Farmers Market and Esperanza Garden. Cities of Farmers: Urban Agricultural Practices and Processes. Iowa City: U of Iowa. 141-58.

New Brunswick Tomorrow. (n.d.). French Street Shopper Intercept Survey. Farmers Market / Esperanza Project Survey. New Brunswick: New Brunswick Tomorrow.

Ramos, Nicole, Chung, Y., Lam, S., Christopher Ackerman, and Nurgul Fitzgerald. (2016). Does product placement influence customers' preferences for promotional materials in corner stores? New Jersey Dietetic Association 84th Annual Meeting, Long Branch, New Jersey.

State of New Jersey, Department of Health. (2016). Women Infants and Children Authorized stores. Retrieved from http://www.state.nj.us/health/fhs/wic/documents/authorvendors.pdf

United States Census Bureau. (2013). American Community Survey 5 Year Estimates 2009-2013.

United States Department of Agriculture, Food and Nutrition Service. (2015). Supplemental Nutrition Assistance Program Retail Locator. Retrieved from http://www.fns.usda.gov/snap/retailerlocator

Voorhees Fellows. (2013). Farm to freezer. New Brunswick: Ralph W. Voorhees Center for Civic Engagement. Edward J. Bloustein School of Planning and Public Policy. Rutgers University. Retrieved from http://rwv.rutgers.edu/wp-content/uploads/2014/06/Farm-To-Freezer-Final-June-14.pdf

Voorhees Fellows. (2014). *Improving community food security in New Brunswick*. New Brunswick: Ralph W. Voorhees Center for Civic Engagement, Edward J. Bloustein School of Planning & Public Policy. Rutgers, The State University of New Jersey.

Appendix A. New Brunswick Stores that Sell Food, 2016

Store Name	Address	Large	Small to Medium	Corner Store	Convenience	SNAP 2016	WIC 2016	Hub City Fresh
7-Eleven #33650	290 George Street							
7-Eleven	358 George Street							
A & B Deli Grocery	173 French Street							
Aldi	6 Van Dyke Avenue							
B & S Meat Marketing	52 Robinson Street							
Bravo (C Town)	275 George Street							
Butler Food Store	109 Easton Avenue							
Campus Deli & Food Store	82 Senior Street							
Cibao Groceries	177 Throop Avenue							
College Farms Foodmart	138 Easton Avenue							
Daisy's Food Market	76 Remsen Avenue							
Danny's Deli and Grocery (Rodos Deli)	240 Somerset Street							
Darian2 Grocery	77 Throop Avenue							
Deli Plaza	3 Elm Row							
Discount Deli And Grocery	55 Georges Road							
Easton Deli	62 Easton Avenue							
El Caribe Grocery	282 Delavan Street							
El Rancho Supermarket	19 Georges Road							
El Rubio (Reyes Supermarket I Llc) (Super Fresco II)	311 Somerset Street							
Express Mart & Deli	30 Paterson Street							
F & F Deli & Grocery	136 Throop Avenue							
F & M Grocery (Marquez Grocery)	12 Jersey Avenue							
Family Delight Grocery Store	284 Somerset Street							
Family Grocery #1 LLC	39 Joyce Kilmer Avenue							
Food Town Livingston Food Corp	20 Elizabeth Street							
Gaby's Bakery Deli and Grocery	108 Joyce Kilmer Avenue							
George Street Co-Op	89 Morris Street							
Guyanese West Indian Grocery	25 Elizabeth Street							

			i		
Harry's Newstand	76 Lee Avenue				
Havana Grocery	229 George Street				
Healthy Way Natural	338 George Street				
Internacional Supermarket corp.	188 Remsen Avenue				
Jaquez Mini Market (Guaraguano Mini Market,)	222 French Street				
Jd Deli & Grocery Llc (formerly Bichan Deli & Grocery) (Azcona)(M&M Grocery)	249 Somerset Street				
Juquila Mexican Grocery Store	100 Lee Avenue				
JYCD Deli & Grocery	214 Commercial Avenue				
Kenny's Corner	15 Easton Avenue				
SuperFresh (Kumkang Fruit &Vegetable Corp)	100 Kirkpatrick Street				
KM Mini Market	280 Suydam Street				
Knights Deli	202 Easton Avenue				
Krauzer's Food Stores	50 Bayard Street				
Krauzer's Food Stores	70 Guilden Street				
L & F Deli and Grocery (T&G) (TG Deli and Grocery)	206 Hamilton Street				
L S Greenburg	422 Jersey Avenue				
La Hacienda	251 French Street				
La Oaxaquena Grocery (Laoxaquena Laoaxaquena)	183 French Street				
La Placita	148 French Street				
La Placita Mexicana	317 Handy Street				
La Union Grocery	35 Throop Avenue				
Latino Supermarket	132 French Street				
Lay-Z Shopper	45 Easton Avenue				
Lo Nuestro Grocery Store	28 S Ward Street				
Los Compa Grocery Llct/ Super Fresco III (formerly Family Grocery)	60 Remsen Avenue				
Los Lopez Bodeguita	285 Remsen Avenue				
Los Lopez Mini Market	279 Remsen Avenue				
Los Lopez Mini Market 2 (Gutierrez Super MiniMarket)	210 French Street				
M & P Grocery and Deli (Los Reyes Supermarket)	908 Somerset Street				

M&N Deli	58 Georges Road				
Martinez Grocery Market	80 Jersey Avenue				
Mi Reina Deli & Grocery	136 Throop Avenue				
Nam's Fish Market	139 French Street				
New Brunswick Community Farmers Market	178 Jones Avenue				
New Brunswick Exxon (TIGER MART)	1200 Somerset Street				
New Brunswick Farmers Market	139 French Street				
New Brunswick Supermarket Inc. (La Mega Meat Market, Martin Abreau)	138 Remsen Avenue				
O & B African Market	35B Elizabeth Street				
Park Convenience	53 Commercial Avenue				
Park Deli Too	51 Commercial Avenue				
Primo Grocery	201 Handy Street				
Quisqueya Meat Market and Grocery II Inc.	108 Remsen Avenue				
Ranks Supermarket I	511 Livingston Avenue				
Reyes Supermarket (formerly Rank's)	35A Elizabeth Street				
Rutgers Mart Convenience Store	160 Easton Avenue				
Rutgers Quick Mart	182 Hamilton Street				
Rutgers Quick Stop	38 Easton Avenue				
Spanish Corner Deli (Community Mini Market Inc)	59 Georges Road				
Super Fresco I (Karen Grocery)	294 Lee Avenue				
Volcano Mini Grocery	218 Sandford Street				
Walgreens	20 Jersey Avenue				
Welsh Farms Convenience Store (Rita Spanish American Grocery)	31 Easton Avenue				
Xtra Savings Supermarket	333c Suydam Street				

Chapter 7. School and Community Gardens

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Anthony Capece and the New Brunswick Community Gardening Coalition

Interest in gardening in New Brunswick has surged. Today the city is home to twelve community and nine school gardens with more than 200 garden beds. The gardens are the product of community efforts to engage residents, community, religious organizations and Rutgers faculty, students, and Extension staff who learn from one another (Layton, 2007). Residents teach one another and share what they known with institutional partners. Meanwhile Rutgers Landscape Architecture faculty and students have worked with residents on garden design, and Rutgers Cooperative Extension staff have tested soil and water for contaminants, provided training, and installed an apple orchard (Rutgers University, School of Environmental and Biological Sciences, 2014). The New Brunswick Children's Library is the location of one of the city's newest gardens. Produced through the collaborative efforts of Unity Square Community Organization, Rutgers Cooperative Extension, 4-H, and the New Brunswick Community Garden Coalition, it is a product of the depth of support for community gardening in the city (see appendix A for garden details).

Many of the city's gardeners work together through the New Brunswick Community Garden Coalition (NBCGC), a coalition of gardening organizations created in 2012, that has matured and increased its capacity to understand gardener needs and interests and to support community gardening. It hosts events, including an annual seed swap, and workshops on gardening skills and soil testing to engage residents and increase gardening skills (D'Auria, 2012). The gardening coalition makes it easier for outside institutions to work effectively with New Brunswick's gardens. Instead of building relationships with every garden director, Rutgers, the New Jersey Agricultural Extension Station, and other organizations reach gardens through the

coalition. For example, the Nature Conservancy worked with the coalition to install cisterns in gardens at the New Brunswick Charter School, New Brunswick Farmers Market, St. Isidore Field, and Jim Landers gardens (Bakacs, 2015). And the New Jersey Agricultural Experiment Station (NJAES) works with the coalition to conduct community-based research to learn how to better harvest rainwater and tests its use in vegetable gardens to ensure it is safe.

The NBCGC also networks the gardens to the broader food security community through the New Brunswick Community Food Alliance's agriculture workgroup, which further extends the organization's capacity and ensures that people are aware of community gardening activities. Their partnership with the New Brunswick Environmental Commission produced a map of the city's community gardens that includes a summary of each garden and contact information (New Brunswick Environmental Commission, 2015; Lange Groth, 2015).



Table 1. New Brunswick Community Gardens, 2016

Garden	Started	Host Organization	Beds
Cook Organic Garden Club	1977	Rutgers Cooperative Extension	75 plots
Jim Landers Community Garden	2002	Unity Square	23 raised
St. Isidore Field Community Garden	2007	Holy Family Parish	28 raised
Suydam St Reformed Church Garden	2007	Suydam Street Reformed Church	2 raised
Feaster Park Community Garden	2008	Unity Square	24 raised
Garden of Hope/Jardin de Esperanza	2008	New Brunswick Community Farmers Market	40 raised
Promise Garden and Apple Orchard	2010	Elijah's Promise	50 plots
Johnson & Johnson Employee Garden	2012	Johnson & Johnson	25 plots
Community Garden of Christ Church	2013	Christ Church	8 raised
New Brunswick Children's Garden	2015	NB Public Library and Esperanza Neighborhood Project	3 raised
Buccleuch Park Pollinators Garden	New	Lower Raritan Watershed Partnership	Natural
Recreation Park Garden	New	New Brunswick Community Farmers Market	26 raised
Resurrection Gardens	New	Holy Family Parish	25 raised
Woodrow Wilson Elementary School	2016	Nurture Thru Nature	2 raised

Table 2. New Brunswick School Gardens, 2016

Garden	Started	Host Organization	Beds
Greater Brunswick Charter School Community Garden*	2013	Greater Brunswick Charter School	3 raised
Joyce Kilmer	2015	PRAB	3 planters
McKinley Community School	2016	Nurture Thru Nature	2 small raised
New Brunswick High School Garden	2015	New Brunswick High School	Large area
New Brunswick Middle School	2015	Nurture Thru Nature/NBMS Environmental Club	1 raised, 2 planters
New Brunswick Middle School	2016	Nurture Thru Nature	N/A
Raritan Gardens	Proposed	PRAB	3 raised
St. Ladislaus	2015	PRAB	2 raised, 3 planters
Woodrow Wilson Elementary School	2016	Nurture Thru Nature	2 raised

^{*} The Greater Brunswick Charter School Community Garden was one of the top 15 school gardens in New Jersey in 2015 (NJ Farm to School Network, 2015).

The recently formed New Brunswick Parks and Garden Commission presents a new opportunity for increased collaboration between community gardens, residents, and city government departments. NBCGC representatives are on the Parks and Garden Commission and the partnership is working to expand growing

spaces in public parks and other open space in New Brunswick including a pollinators project in Buccleuch Park and a new garden in Recreation Park.

Learning in the Gardens

New Brunswick's gardens are educational spaces. Workshops and classes teach people skills to grow food, introduce new foods and how to cook them, and gardeners learn from one another and from the experience of gardening. For example, a preschool class grows food at Promise Garden and Apple Orchard and third grade students learn about lead safety and other topics at monthly 4-H meetings in the 'Pizza & Taco' Garden at the New Brunswick Public Library (Children's Library Librarian, 2015). Girl Scouts garden in the New Brunswick Community Farmers Market Children's Garden. And Junior Girl Scout Troop 82010 weeded, tilled, and planted at Roosevelt Elementary School, under the guidance of the New Brunswick Community Farmers Market Nutrition Outreach Coordinator in 2014. They grew 16 everbearing strawberry plants, tomatoes, okra and sunflowers, and became the "Garden Guardians" (Rutgers University, School of Environmental and Biological Sciences, Office of Communications, 2014). At the Greater Brunswick Charter School, preschool and kindergarten children learn in the garden and students donate the food they grow to the school's food pantry. Meanwhile, FoodCorps members run afterschool programs in some gardens.

The gardens have also become the location for projects designed to increase exercise and education. Elijah's Promise, with Rutgers Medical School and the Rutgers Landscape Architecture department, started a "Guardians of the Garden" program in 2015, to connect guests of Elijah's Promise Soup Kitchen with the Promise Garden and Apple Orchard. It paid them a modest stipend for their work in the garden twice a week for 16 weeks during the growing season (see Figures 1 and 2). The participants also helped with a pilot compost project. Elijah's Promise also provides compost education in the Promise Garden and Apple Orchard and intends to expand this program to include other community gardens in New Brunswick.

iSea un **Become** a **Protector de Jardines!** Garden Guardian! Capacitación de Liderazgo Leadership Training Program Tiene interés en la jardinería? Quiere aprender sobre: Hacer abono/composting? Contruir un cajon para sembrar? Mantenerse la tierra inocua del plomo? Are you interested in gardening? Do you want to learn more about Composting? Building raised beds? ing safe from soil contamination? La Coalición de Jardines Comunitario de The New Brunswick Community Garden New Brunswick les invita a jardineros y Coalition is inviting gardeners and others interested in these topics to participate in otros interesados en aprender más sobre estos temas a participar en el programa de Protectores de Jardines! the Garden Guardians Program! Session #2: Composting Saturday, May 7 at 10:30am Para inscribirse: 732-545-0329 To register, call: 732-545-0329 Este es un proyecto del This is a project of Habrán actividades para niños Youth activities will be provided.

Figures 1 and 2. Become a Garden Guardian Advertisement

Many residents also grow produce around their homes in the ground and in containers (Voorhees Fellows, 2011). To support these activities, Rutgers Cooperative Extension of Middlesex County offers free educational workshops to residents on topics such as growing food, soil testing, and attracting birds and butterflies (Middlesex County Agricultural Extension, 2015).

Gardening and Soil Contamination Education and Testing

Community leaders and their partners have been expanding the ability to test for elevated lead levels in garden and yard soil; to train residents about lead risk, testing, and what to do to remediate; and to develop remediation programs. The Lead-Safe Backyard Gardening Program is a collaborative effort of Rutgers Cooperative Extension, Unity Square Partnership, and Elijah's Promise that serves Spanish speaking residents of New Brunswick. The objective is to teach residents about soil contamination and how to test and remediate it. The training includes two classes with instruction about lead and soil, how to interpret soil test results, what to do if there is lead in the soil, and what composting is and how and why to do it. The course provides tools and garden plants. Participants share this information in their communities and work with homeowners to test soil in areas of concern, such as where people garden or where children play. Unity Square community organization advertises and promotes the program, encourages people to attend, helps teach it, and provides translation. In phone surveys with 58 program participants after their initial training, Rutgers Cooperative Extension found that many of the participants had retained what they learned and were now wearing gloves, adding compost, and gardening in raised beds. They also found that more than three quarters of the participants had shared what they learned with others (Rutgers Extension, 2014: 99). The program, which has grown over the years, trained 23 people in 2015 who then shared what they learned with other residents (Bakacs, 2015).

The Community Garden Coalition is developing a two-part gardener leadership training program and plans to expand soil contamination education for youth. Laura Eppinger, of the 4-H Program, and Michele Bakacs, at NJAES, co-authored a two-part curriculum about lead for youth and are piloting it.

Conclusion

New Brunswick has a robust community gardening infrastructure and the number of gardens has grown over the last few years. Gardens provide fresh food, facilitate outdoor physical activity, enhance learning opportunities and build community capacity. The New Brunswick Community Garden Coalition connects community garden leaders, creates linkages to gardening resources such as plants and training, and provides information and training for residents. Many residents also grow food in their yards, in raised beds, and in pots or on windowsills. Community leaders and residents asked for more training for these residents, as they are concerned about soil contamination and would like to expand support for people who grow above ground and in containers. Leaders also would like to expand programs to test and remediate soil. Resident interviewees suggest that some residents who would like to garden are unsure about how to access a community garden and some are unaware that they can grow food for themselves and their families in a community garden.

Ideas for the Future

Community Gardening

Interviewees wondered whether community growing efforts can expand to cultivate food and offer lectures and educational programming inclusive of the arts and in native languages. Many resident interviewees, especially residents who use the food pantries, are interested in growing food in community gardens but some are not aware of the gardens, did not know how to reserve a garden bed, or found that their nearest community garden is full. Interviewees suggested ways to advertise community gardens:

- Create a central phone number and email account to learn about community gardening opportunities and identify a garden bed.
- Distribute a community garden map, with a bilingual (English/Spanish) guide that explains
 how people can get involved in community gardening in food pantry bags, at WIC and
 SNAP offices, New Brunswick schools, and through SNAP-Ed, 4-H, and FoodCorps.
- Have an NBCGC member visit the WIC office on public education days to talk with WIC participants about the gardens and how to get involved.
- Conduct a Spanish language seed swap with native Spanish speakers.

Growing Food in Residential Yards

Interviewees asked for more support for residents to grow food in yards and indoors safely. Interviewees asked if there are resources to make gardening at home easier, such as NJAES/Extension briefs or NBCGC workshops about the best food to grow indoors or in pots outdoors. Interviewees asked for more education and training about soil contamination and remediation and for compost to remediate contaminated soil.

References

Bakacs, Michele. (2013). Safe soil: A healthier way to garden. Rutgers NJAES Cooperative Extension. Retrieved from http://njaes.rutgers.edu/pubs/publication.asp?pid=E342 (there is also a Spanish version)

Bakacs, Michele. (2015). Safe practices for urban gardening. In Rutgers Cooperative Extension Education Opportunities in Urban Agriculture. Retrieved from http://www.njgardencities2015.com/MarissaBlodnik_RCE%20Presentation.pdf

Cook Organic Garden Club. (2014). [http://h]https://sites.google.com/site/cookorganicgardenclub/home

D'Auria, Alena. (2012). Cultivating community: The growth and goals of the New Brunswick Community Gardening Coalition. Retrieved from http://www.nbfoodalliance.org/wp-content/uploads/2015/01/Cultivating-Community.pdf

Dobbs, Margaret. (2013). New Brunswick community garden report. Ralph W. Voorhees Center for Civic Engagement. Edward J. Bloustein School of Planning & Public Policy. Rutgers.

Elijah's Promise. Shiloh Garden and Apple Orchard. [http://h]http://www.elijahspromise.org/what-we-do/community-gardens/

Lange Groth, Julie. (2015). Map connects people with food. ANJEC Report, Summer.

Layton, Perry, ed. (2007). Five gardens transformed. Organic Gardening April.

Middlesex County Agricultural Extension. (2015). Rutgers Cooperative Extension of Middlesex County. Retrieved from http://www.co.middlesex.nj.us/Government/Departments/BDE/Pages/Office_Extension.aspx

New Brunswick Community Garden Coalition (NBCGC). Retrieved from https://nbcommunitygardens.wordpress.com

New Brunswick Environmental Commission. (2015). The parks and gardens of New Brunswick. [http://h]http://thecityofnewbrunswick.org/wp-content/uploads/2014/04/Parks-and-Gardens-April-2015-Final-Brochure.pdf

New Jersey Farm to School Network. (2015) Top 15 school gardens. Retrieved from http://www.njfarmtoschool.org/top-15-school-gardens-selected-for-school-garden-of-the-year-award/

Rutgers, the State University of New Jersey, Cooperative Extension. (2014). 2013 Rutgers combined research and extension annual report. Accomplishments and results. Retrieved from http://portal.nifa.usda.gov/web/areera/Reports/2013/2013-Rutgers-Combined-Research-and-Extension-Annual-Report-of-Accomplishments-and-Results.pdf

Rutgers, the State University of New Jersey, Master Gardener Program. (2014). 2013 Annual Report. [http://h]https://njaes.rutgers.edu/mastergardeners/mg-annualreport-2013.pdf

Rutgers, the State University of New Jersey, School of Environmental and Biological Sciences. (2014). Gardening the garden state. Retrieved from http://communitygarden.rutgers.edu/research/NBCGC.html

Rutgers, the State University of New Jersey, School of Environmental and Biological Sciences, Agricultural Experiment Station, Office of Communications. (2014). New Brunswick Girl Scout troop adopts children's garden at local farmer's market. Newsroom. Retrieved from http://sebsnjaesnews.rutgers.edu/2014/05/new-brunswick-girl-scout-troop-adopts-new-brunswick-community-farmers-market-childrensgarden-during-the-2014-season/

United States Environmental Protection Agency. (2010). Environmental Justice Small Grants Recipients – FY2010. Retrieved from http://www.epa.gov/environmentaljustice/grants/ej-smgrants-recipients-2010.html

Voorhees Fellows. (2011). *Urban agriculture in New Brunswick*. New Brunswick: Ralph W. Voorhees Center for Civic Engagement, Edward J. Bloustein School of Planning & Public Policy. Rutgers, The State University of New Jersey.

Voorhees Fellows. (2014). *Improving community food security in New Brunswick*. New Brunswick: Ralph W. Voorhees Center for Civic Engagement, Edward J. Bloustein School of Planning & Public Policy. Rutgers.

Appendix A. Information about Selected New Brunswick Community Gardens

Community Garden Coalition Managed Lower Raritan Watershed Partnership Funded Beds / Plots Natural Plot size Growing area Users New Brunswick children Location Buccleuch Park Light Water Compost Schedule COMMUNITY GARDEN OF CHRIST CHURCH 5 Paterson Street Established 2013 Owned Christ Church Managed Christ Church Funded Bank of Princeton and Christ Church Beds / Plots 8 raised beds Plot size 8 ft. x 4 ft. Growing area 256 sq. ft. Five plots are used by church members who grow herbs and vegetables for the food pantry. A restaurant uses the remaining plot to grow herbs Location Visible from Paterson Street Light Mostly sunlight with some shade Water One rain barrel and the church provides water as needed Compost One compost bin		BUCCLEUCH PARK POLLINATORS GARDEN 321 Easton Avenue (Buccleuch Park)
Managed Lower Raritan Watershed Partnership Funded Beds / Plots Natural Plot size Growing area Users New Brunswick children Location Buccleuch Park Light Water Compost Schedule COMMUNITY GARDEN OF CHRIST CHURCH 5 Paterson Street Established 2013 Owned Christ Church Managed Christ Church Funded Bank of Princeton and Christ Church Beds / Plots 8 raised beds Plot size 8 ft. x 4 ft. Growing area 256 sq. ft. Five plots are used by church members who grow herbs and vegetables for the food pantry. A restaurant uses the remaining plot to grow herbs Location Visible from Paterson Street Light Mostly sunlight with some shade Water One rain barrel and the church provides water as needed Compost One compost bin	Established	New
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Water One rain barrel and the church provides water as needed Compost One compost bin	Location	Visible from Paterson Street
Compost One compost bin	Light	Mostly sunlight with some shade
	Water	One rain barrel and the church provides water as needed
Organic practices Organic where possible	Compost	One compost bin
organio praetico	Organic practices	Organic where possible

	COOK ORGANIC GARDEN CLUB 14 College Farm Road (Cook/Douglas Campus)
Established	Rutgers University undergraduate students established it in 1977 as a membership-based community garden. In the 1980s, with the support of the Sustainability Club and the Garden Club, it became a graduate student organization
Owned	Rutgers University
Managed	Rutgers University students
Funded	Rutgers University
Beds / Plots	75 in-ground beds
Plot size	20 ft. x 20 ft.
Growing area	30,000 sq. ft.
Users	Open to the community
Location	It is on university grounds
Light	To allow light, trees and tall structures are not allowed
Water	4 spigots
Compost	The compost area is not centrally located
Schedule	
Organic practices	Organic
	FEASTER PARK COMMUNITY GARDEN 126 Throop Avenue & Handy Street (Feaster Park)
Established	2008
Owned	Located inside public park: Feaster Park
Managed	Unity Square
Funded	New Brunswick provides the land, resources, and funding
Beds / plots	24 raised beds
Plot size	10 ft. x 4 ft. & 5 ft. x 4 ft.
Growing area	920 sq. ft.
Users	Community residents
Location	The garden is visible from the street
Light	All the plots have access to appropriate light
Water	Water hose hookup and rain barrels
Notes	An area of the garden is used for growing ornamentals

	GREATER BRUNSWICK CHARTER SCHOOL COMMUNITY GARDEN 429 Joyce Kilmer Avenue
Established	2013
Owned	Greater Brunswick Charter School
Managed	Middlesex County Master Gardeners with New Brunswick 4-H staff and volunteers assisted in the development of the garden. During the school year, students maintain it
Funded	Donations, local businesses and teachers, and small scale fundraising
Beds / Plots	3 raised beds: 2 vegetable beds, 1 Butterfly Garden
Plot size	2 beds 20 ft. x 12 ft. & 1 bed 20 ft. x 16 ft.
Growing area	
Users	Students at the Charter School learn about growing fruits and vegetables, take home vegetables and learn about pollinators in the Butterfly Garden
Location	Located against the back wall of the school, protecting a paved picnic area delineated by a walkway in a fenced in playground
Light	There is sufficient light
Water	Greater Brunswick Charter School provides water
Compost	2 compost bins and compost pile
	ST. ISIDORE FIELD COMMUNITY GARDEN 56 Throop Avenue (Holy Family Parish at Sacred Heart Church)
Established	2007
Owned	Sacred Heart Church
Managed	Volunteers and Holy Family Parish staff coordinate garden activities
Funded	Sacred Heart Catholic Church
Beds / Plots	28 raised beds
Plot size	12 ft. x 4 ft.
Growing Area	1,344 sq. ft.
Users	Holy Family Parish and community members grow in 26 beds; young children use the other 2 for education in nutrition and gardening
Location	The beds are on a lot across from the church and are easily accessible
Light	There is sufficient light; some beds are shaded
Water	Two rain barrels collect water; additional water barrels are refilled with water provided by the church
Compost	Three-bin compost system
Notes	"[T]here is a high demand for garden beds when they become available. There is a small but consistent turnover every year and open spots are filled quickly"

JIM LANDERS COMMUNITY GARDEN 220 Suydam Street (Unity Square)			
Established	2002		
Owned	City of New Brunswick		
Managed	Community residents and Unity Square		
Funded			
Beds / Plots	23 raised beds		
Plot size	8 ft. x 4 ft.		
Growing area	736 sq. ft.		
Users	Community residents		
Location	On a lot bordered by houses on both sides		
Light	There is sufficient light		
Water	NB Fire Department replenishes two water barrels weekly		
Compost	Three-bin compost system is in the back of the garden		
Notes	Residents relocated the first community garden to this location when that space was used in the HOPE VI redevelopment project		
	NEW BRUNSWICK CHILDREN'S LIBRARY GARDEN 60 Livingston Avenue		
Established	2015		
Owned	New Brunswick Public Library		
Managed	New Brunswick Public Library and Esperanza Neighborhood Project		
Funded	Unity Square		
Beds / Plots	3 raised beds		
Plot size	2 ft. x 3 ft.		
Growing area	18 sq. ft.		
Users	Visitors to the library during educational events		
Location	On the corner of Livingston Avenue and Morris Street		
Light	Sunlight with some shade		
Light Water	Sunlight with some shade The New Brunswick Public Library provides water		

	PROMISE GARDEN AND APPLE ORCHARD (ELIJAH'S PROMISE) Abeel Street & Tabernacle Way / Oliver Street
Established	2010
Owned	New Brunswick United Methodist Church
Managed	Elijah's Promise
Funded	
Beds / Plots	50 plots (Updated information from Elijah's Promise)
Plot size	8 ft. x 4 ft.
Growing area	1,280 sq. ft.
Users	Community residents, children, University staff and students
Location	Downtown, visible from George Street
Compost	Compost system
Operation Schedule	Early April to late October
	RECREATION PARK GARDEN
Established	New
Owned	Recreation Park
Managed	New Brunswick Community farmers Market
Funded	
Beds / Plots	26 raised beds
Plot size	
Growing area	
Users	
Location	Located in Recreation Park
Light	Ample light
Water	
Compost	
Schedule	

	JARDIN DE ESPERANZA (GARDEN OF HOPE) 178 Jones Avenue (New Brunswick Farmers Market)
Established	2010
Owned	Rutgers Cooperative Extension
Managed	Managed with the New Brunswick Community Farmers Market
Funded	Johnson & Johnson's grant funded the garden and market
Beds / Plots	40 plots (30 boxes in front; 10 boxes in back parking lot)
Plot size	8 ft. x 4 ft.
Growing area	1,344 sq. ft.
Users	Community residents
Location	The garden is sited towards the back of the Farmers Market. It operates with the market, two hoop houses, picnic areas, and playground in a publicly accessed site at Rutgers University. This combination of activities makes a connection between residents, people affiliated with the University and visitors who come to the market.
Light	There is adequate light
Water	Water spigot and rain barrel
Compost	10 compost bins

	RESURRECTION GARDEN
Established	New (revived Pope Francis Garden)
Owned	Holy Family Parish Gardens
Managed	Holy Family Parish Gardens
Funded	
Beds / Plots	25 raised beds
Plot size	24 beds 3 ft. x 4 ft. & 1 bed 4 ft. x 12 ft.
Growing area	
Users	
Location	Across from Lord Stirling School
Light	
Water	
Compost	No composting available
Schedule	No particular operation schedule

Chapter 8. Food Pantries and the "Emergency" Food System in New Brunswick

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New Brunswick's more than 20 food pantries and two soup kitchens provide groceries and meals for low-income people. This chapter is focused on food pantries which work with regional food banks and volunteers who donate time, food and other goods. To better understand how food pantry organizations operate and to identify opportunities to improve the emergency food system, Rutgers University students, staff, and faculty worked with the Feeding New Brunswick Network (FNBN), a coalition of emergency food providers in the city. During the 2015-16 academic year the research team interviewed 14 food pantry directors, visited two regional food banks (Community FoodBank of New Jersey and M.C.F.O.O.D.S.), volunteered at four pantries, interviewed 20 pantry guests, and documented what food flows through St. Vincent de Paul food pantry to guests (see Table 1).

Table 1. Interviews and Participant Observation in New Brunswick Food Pantries

Pantry Name	Pantry Interviewed	Pantry Observed	Guests Interviewed
Bayard Street Presbyterian Church			
Christ Church Episcopal			
Deliverance Prayer Revival Tabernacle			
Ebenezer Baptist Church*			
Elijah's Promise*			
Emanuel Lutheran			
Five Loaves Food Pantry			
Greater Brunswick Charter School			
New Brunswick Housing Authority			
NB School Based Youth Services Paul Robeson and Middle School			
NB School Based Youth Services McKinley School**			
NB School Based Youth Services Roosevelt School & Lord Stirling			
PRAB - Service Access Center Representatives			
Rutgers Student Food Pantry			
Salvation Army Family & Community Emergency Services	Not ava	ailable	
Society of St. Vincent DePaul			
St. Alban's Church Food Pantry	No res	ponse	
Suydam Street Reformed Church			
Tabernacle Baptist Church	No res	ponse	

^{*}Soup kitchens provide limited groceries through specialized programs

Food Pantry Organizations

Food pantry work involves picking up, storing, unloading, sorting and distributing food, managing volunteers, and organizing food and cash donations. Religious institutions, schools and social service organizations operate food pantries in New Brunswick. Most pantries are small volunteer-led efforts that provide food to a small number of people once a week or month. Five large pantries are also mostly volunteer-led, participate in federal and state feeding programs, are open multiple times per week and serve more than a couple of hundred people each month (see Table 2).

^{**}The McKinley School pantry is new.

Table 2. Organizational Characteristics of New Brunswick Food Pantries, 2016

Name	Non-profit Type	Years	Category	Director	Days / Month	Weekend	Evening	Monthly Visits
Bayard Street Presbyterian Church Pantry	Faith based	4	Small	Volunteer	1	1	0	1
Christ Church Episcopal	Faith based	10	Large	Volunteer	6	2	4	2
Deliverance Prayer Revival Tabernacle	Faith based	9	Small	Volunteer	4	0	4	NA**
Ebenezer Baptist Church	Faith based	25	Soup kitchen	Volunteer	4	0	0	NA
Elijah's Promise	Non-profit	26	Soup kitchen	Paid				
Emanuel Lutheran	Faith based	20	Large	Volunteer	5	1	0	1
Five Loaves Food Pantry at Second Church	Faith based	6	Large	Volunteer	21	0	NA	NA
Friends of Greater Brunswick Charter School	School	8	School	Paid	22	0	8	1
NB Housing Authority	Government	~ 3	Small	Paid	4-5	0	0	1
NB School Based Youth Services: Paul Robeson and Middle School	Non-profit/ school	3	School	Paid and volunteer	21	0	0	NA
NB School Based Youth Services: Roosevelt School & Lord Stirling	Non-profit/ school	3	School	Paid and volunteer	21	0	0	NA
PRAB - Service Access Center	Non-profit	7	Small	Paid	4	0	NA	1
Rutgers Student Food Pantry	School	<1	Small	Paid	21	0		NA
Salvation Army	Faith based	1990s	Small	NA*	NA	NA	NA	NA
Society of St. Vincent DePaul	Faith based, non-profit	>19	Large	Volunteer	8	4	0	4
St. Alban's Church Food Pantry	Faith based	NA	Small	NA	NA	NA	NA	NA
Suydam Street Reformed Church	Faith based	NA	Large	Volunteer	14	9	0	1
Tabernacle Baptist Church	Faith based	NA	Small	NA	NA	NA	NA	NA

^{**}NA - not available; Evening hours - after 5:00pm

Staff and Volunteers

Paid staff run the pantries at the New Brunswick Housing Authority, PRAB, preschools, and at the public and charter schools, but many of these staff also volunteer their time and vehicles to pick up and distribute food. Volunteer directors and staff at the other food pantries include church members, community members, pantry guests, college and high school students, and children/youth. In addition to the pantry work described above, New Brunswick High School and Middlesex County College student volunteers help non-bilingual pantry staff to communicate with Spanish speaking residents.

To train volunteers, pantries have created on-the-job training targeted to specific tasks such as assembling grocery bags and running food bags to distribution. Pantries that accept federal and state food participate in more formalized training through the Community FoodBank of New Jersey, and pantry staff who distribute meat and fresh produce are trained and certified to do so.

Pantry directors discussed a variety of staff-related challenges. Each pantry works best with an optimal number of volunteers, and that number varies by pantry. With too many individuals, volunteers are bored and may not return. With too few individuals, pantries struggle to collect food, unload trucks, and distribute food. Volunteer consistency is another challenge. Although some pantries have developed cadres of regular volunteers who view their pantry volunteer colleagues as family, most pantries depend on less regular volunteers. For example, college students are an important volunteer source given the proximity of Rutgers University and Middlesex County College. However, they are not always available, sometimes do not show up, and are often unavailable during school breaks. Many pantries depend on older volunteers who may be more consistent but may not be able to carry heavy cases of food. Some pantries are located down a flight of stairs, which is an additional challenge for older volunteers. Pantry directors also worry about succession as some leaders have run the pantries for years and it may be unclear who would take their places if they decide to leave the organizations (see Table 2). With this concern in mind, St. Vincent de Paul is creating an institutional infrastructure that expands the number of people who know how the pantry operates to better ensure its continuation.

Hours of Operation

Most pantries are open for a few hours on one or more days each week. When they are open depends on their food sources and the types of food they distribute (e.g., fresh produce), whether they are hosted by a non-profit organization with regular hours, and volunteer capacity. Staff run pantries tend to be open during the times their host organizations are open. Volunteer run pantries are open when volunteers can staff them. Pantries that participate in the federal food program TEFAP are required to be open at least nine hours each month, which includes one weekend day or evening. Most pantries are open on Wednesdays because they pick up shelf-stable foods on Tuesdays and perishable foods on Wednesdays from M.C.F.O.O.D.S., the county food bank, and have to distribute that food quickly to guests. St. Vincent de Paul, Christ Church, Emanuel Lutheran and Bayard Presbyterian Church are open for a few hours on Saturdays. Five Loaves pantry is open many days of the week, more often than other pantries, while Bayard Presbyterian is open a couple of times a month. The school pantries are open on school days during the academic year.

Eleven pantries provide food outside of these hours if possible and seven deliver food to guests in extreme emergencies. Five Loaves Pantry is the only pantry that regularly delivers food. It brings groceries to 125 seniors at St. Mary's apartments on Remsen Avenue monthly. Four food pantry coordinators said they would like to increase their hours but are limited by the number of volunteers, volunteer concerns about safety during evening shifts, or a lack of storage space. Pantry hours work well for some of the pantry guests we interviewed but others asked for expanded Saturday afternoon hours to better accommodate work schedules and the public bus which runs on a holiday schedule on Saturdays. People also asked for expanded evening hours from 6pm or 7pm - 9pm, which works better for people who work through the early evening.

Location, Signage, and Web Presence and Waiting Lines

Pantry directors and guests observed that few pantries have signage or their own website or social media presence. Some asked for support in creating signs and a digital media presence. Others thought this was less important because the community networks were effective and some people lack smartphones or

Internet access. Pantry client interviewees requested that pantries provide places inside to wait in line for food because the weather is sometimes hot, cold, or rainy.

Facilities and Food Storage

Some pantries would like to distribute more fresh, refrigerated, or frozen foods but they are limited by their storage capacity. Some lack space to store dry goods and many would like to expand their freezer and refrigeration capacity. The school pantries have the most limited space. Even a pantry with comparably large dry storage such as St. Vincent de Paul struggles because it limits Community FoodBank of New Jersey delivery to once a month to save on delivery costs. On distribution days, St. Vincent de Paul staff move food out of the storage room and into a hallway to create enough room to assemble and distribute bags (see Table 4).

Guests

Most pantries serve a mix of single individuals and families who live in and outside of New Brunswick. St. Vincent de Paul, one of the largest pantries, only serves New Brunswick residents. Each month St. Vincent de Paul pantry serves about 1,000 households, Five Loves about 500 families, Emanuel Lutheran about 220 guests, Bayard Street Presbyterian about 200 guests, PRAB and Tabernacle Baptist about 100 guests, the school pantries about 40 families, and the Housing Authority serves about 22 families. In some pantries, the number of guests increases in the summer while in others like at St. Vincent de Paul, experience a decrease until school starts again in the Fall.

Food pantry guests use food pantries for a variety of reasons. Some work part- or full-time and do not make enough money to purchase food. Some do not have enough money to pay other bills (housing, medical) and also afford food. Some receive Supplemental Nutrition Assistance Program (SNAP) benefits but do not receive enough to purchase all of the food they need. And some do not work full time jobs because of physical or mental disabilities, alcohol and or drug addiction, or because they care for children, grandchildren, or sick family members.

Table 3. Food Pantry Guests

•		
Name	Guests	Number of guests Served ¹
Bayard Street Presbyterian Church Pantry	More Hispanic people and children	200-250 people a month
Christ Church Episcopal	Mostly Hispanic, number of guests has decreased, fewer homeless, more families and immigrants	170-225 signatures and 300-480 people served per month
Deliverance Prayer Revival Tabernacle	All English speaking and guests are mostly parents, members of church or heard through word of mouth	25-30 families a week
Ebenezer Baptist Church	Homeless, families, Hispanic, white, African-American	100-110 individuals per week using soup kitchen
Elijah's Promise	Small program through Ryan White	95 people a month
Emanuel Lutheran	60% Hispanic, 20% African American, 15% White, 5% other	220 families per month
Five Loaves Food Pantry	Database of 1,400 guests, about half are Spanish speaking immigrants, homeless, some families come with grandparents, aunts and uncles	500 families and 125 seniors at St. Mary's apartments per month
Friends of Greater Brunswick Charter School	Households with children who attend the charter school	Do not count households who use the pantry, 170 students in the backpack program
New Brunswick Housing Authority	Residents of Public Housing	5-6 households a week
New Brunswick School Based Youth Services: Paul Robeson and Middle School	Households with children in those schools	
New Brunswick School Based Youth Services: Roosevelt School & Lord Stirling	Households with children in those schools	
PRAB - Service Access Center Representatives	Mix of older and younger families	22 households one week, 15 households the week before
Rutgers Student Food Pantry	Rutgers students only	Unknown
Salvation Army	NA*	NA
Society of St. Vincent DePaul	New Brunswick residents who meet TEFAP and SFPP requirements	1,000 households per month
St. Alban's Church Food Pantry	NA	NA
Suydam Street Reformed Church	NA	NA
Tabernacle Baptist Church	NA	NA

¹ The pantries record their distribution in different ways, so it is not possible to standardize across them.

^{*}NA= not available

Table 4. Food Pantry Storage Space

Pantry	Non-perishable	Refrigerators	Freezers
Bayard Street Presbyterian Church	Church building kitchen	0	0
Christ Church Episcopal	Two storage rooms	2 refrigerators	4 freezers
Deliverance Prayer Revival Tabernacle	Kitchen	1 household refrigerator	1 household freezer
Ebenezer Baptist Church	Shed and kitchen	0	3 freezers
Elijah's Promise	Pantry	shared with EP	shared with EP
Emanuel Lutheran	Large room	1 household refrigerator, 1 refrigerator-freezer	6: 1 chest, 3 large stand up, 1 household freezer/ refrigerator, 1 refrigerator- freezer*
Five Loaves Food Pantry	9x12 room, additional storage space	3 refrigerators	4 deep freezers
Greater Brunswick Charter School	Large storage closet	1 household refrigerator	1 household freezer
NB Housing Authority	Large storage closet	1 household refrigerator	1 household freezer
NB School Based Youth Services Paul Robeson and Middle School	Cabinets	0	0
NB School Based Youth Services Roosevelt School & Lord Stirling	Cabinets and small room	1 household refrigerator at Roosevelt School	1 household freezer at Roosevelt School
PRAB - Service Access Center	Room	1 household refrigerator	1 household freezer
Salvation Army	NA	NA	NA
Society of St. Vincent DePaul	16x20 room, and another room	2 refrigerators	1 freezer
St. Alban's Church Food Pantry	NA	NA	NA
Suydam Street Reformed Church	NA	NA	NA
Tabernacle Baptist Church	NA	NA	NA

Food and Goods

The pantries and soup kitchens gather food from a variety of sources such as the Community FoodBank of New Jersey (regional food bank), M.C.F.O.O.D.S. (county food bank), direct food and cash donations, The Emergency Food Assistance Program (TEFAP), a federal program, and the State Food Purchase Program (SFPP). Pantries that accept federal and state food generally manage a greater volume of food and have additional work associated with government programs such as sorting food according to federal and state rules, maintaining and submitting paperwork, and training pantry staff in federal and state rules and safe food handling.

Pantries seek out food and products to meet the needs of their guests. Some guests are homeless and need easy to eat foods/meals and utensils. The St. Vincent de Paul pantry provides more resources for families with babies and participates in a diaper program with the regional food bank. The pantry guests we

interviewed described which pantries they visit and why. While a few people get food from one pantry, most get food from multiple pantries. They do so because they need more food than one pantry provides and different pantries offer different types of foods and goods. For example, some pantries regularly provide meat, cooking oil, produce, bread and cakes, toilet paper, diapers and other items for babies (see Table 5).

Table 5. Where and How New Brunswick Food Pantries Get Food

Pantry Name	Federal TEFAP	State SFPP	Purchase	M.C.F.O.O.D.S.	Food Drive	Food or Cash Donation
Bayard Street Presbyterian Church						
Christ Church Episcopal						
Deliverance Prayer Revival Tabernacle						
Ebenezer Baptist Church						
Elijah's Promise						
Emanuel Lutheran						
Five Loaves Food Pantry at Second Church						
Greater Brunswick Charter School						
NB Housing Authority, 7 Van Dyke Ave						
NB School Based Youth Services Paul Robeson and Middle School						
NB School Based Youth Services Roosevelt School & Lord Stirling						
PRAB - Service Access Center Representatives						
Salvation Army Family & Community Emergency Services			NA*		NA	NA
St. Vincent de Paul						
St. Alban's Church Food Pantry	NA	NA	NA		NA	NA
Suydam Street Reformed Church			NA		NA	NA
Tabernacle Baptist Church	NA	NA	NA		NA	NA

^{*}NA = not available

Community FoodBank of New Jersey

The Community FoodBank of New Jersey (CFBNJ), located in Hillside, New Jersey, is the regional food bank that serves New Brunswick. The CFBNJ receives food through state and federal food programs, corporate and individual donations, grocery store and farm gleaning, and food drives. Local food distribution organizations like food pantries that participate in the federal or state food programs receive monthly allotments of free food; the amount depends on the number of people they serve. Pantries can also purchase

food from Community FoodBank of New Jersey through two channels, the co-op list and the non co-op list. The co-op list includes food that CFBNJ has purchased at low prices. The non co-op program allows pantries to "purchase" food for a \$0.16-0.18/lb shared maintenance fee.

CFBNJ receives food from non-governmental sources as well. Corporations donate food that is close to expiration, has been phased out, has damaged packaging, or is refused at delivery. Wakefern and ShopRite stores donate food as do other grocery stores. Gleaning organizations such as America Grows-a-Row grow and pick and donate fresh produce like apples, blueberries, squash, sweet potatoes, white potatoes, and lettuce from participating New Jersey farms.

In 2015, seven New Brunswick food pantries partnered with the Community FoodBank of New Jersey and received federal (TEFAP) and state (SFPP) food; others are Community FoodBank of New Jersey partners that can pick up donated food only. Four New Brunswick schools (Paul Robeson, New Brunswick Middle School, Woodrow Wilson, and Livingston) participate in Community FoodBank of New Jersey's backpack program that provides food over the weekend and the Salvation Army operates a Kids Cafe in partnership with CFBNJ. Getting food to the pantries is logistically challenging. CFBNJ's Hillside facility is about a 35 minute drive from New Brunswick without traffic and few pantries regularly shop there in person. Community FoodBank of New Jersey delivers, but street parking restrictions and delivery cost mean that few New Brunswick pantries opt for this service. Many pantry volunteers and staff use their own cars to transport food though some like Five Loaves Food pantry rent vehicles. A few other New Brunswick pantries rent a shared vehicle to pick up their Community FoodBank of New Jersey allotment at M.C.F.O.O.D.S..

In addition to food services, Community FoodBank of New Jersey offers a variety of programs including assistance applying for SNAP benefits, filing tax returns, volunteer processing and training center, culinary arts program, butcher education program, diaper bank, Tools 4 Schools (where teachers can pick up school supplies), kids clothing closet (where teachers and food pantry directors can pick up clothing for their students and guests), and an Agency Direct Store Pickup Program. This last program links some Community FoodBank of New Jersey agencies with supermarkets directly.

Middlesex County Food Organization and Outreach Distribution Services (M.C.F.O.O.D.S.)

M.C.F.O.O.D.S., Middlesex County's food bank located in East Brunswick, receives donated food and personal hygiene and baby items from a variety of sources. It sometimes receives monetary donations which allows it to purchase food. Organizations pick up the same amount of food in an "allotment" on Tuesday mornings. M.C.F.O.O.D.S. sometimes offers additional items at pick-up and pantries can choose what they want. On Wednesdays, M.C.F.O.O.D.S. distributes perishable food which usually includes produce, meat, dairy, and frozen foods. Because M.C.F.O.O.D.S. lacks refrigeration, all of the food has to be distributed within hours of delivery. On average, during 2015, 13 New Brunswick pantries picked up non-perishable food on Tuesdays and nine picked up perishable food on Wednesdays.

Figure 1. M.C.F.O.O.D.S. FlyerDirect Donations

Community Food Drive

To benefit M.C.F.O.O.D.S.

M.C.F.O.O.D.S. is Middlesex County's Emergency Food Distribution Network that serves over 80 local food pantries and soup kitchens and about 25 additional agencies including residential facilities, shelters, social service agencies, programs for women and children, senior citizen housing facilities and other outreach services each week.

There is an urgent demand for emergency food at this time and we are desperately in need of donations. Currently our warehouse is running low on many items. We are having great difficulty meeting the increasing needs of those we serve.

Please help replenish the supply of food at the county distribution site and guarantee that all Middlesex County residents in need have access to nutritious foods and necessities such as:

Tuna Fish, Cereal, Macaroni & Cheese, Canned Meats & Pastas, Stew, Peanut Butter, Jelly, Fruits, Vegetables, Rice, Stuffing, Potatoes, Paper Products, Toiletries & Baby Supplies such as, Soap, Shampoo, Toothpaste, Diapers & Wipes.



(Canned and packaged goods only, NO glass items.)

We appreciate your anticipated contribution to help ensure that we have a constant supply of these much needed food items to help keep our shelves stocked.

Thank you for your support and generosity.

M. C. F. O. O. D. S. 732-729-0880

Middlesex County Food Organization and Outreach Distribution Services

Food pantries receive direct food and cash donations from companies, non-profit organizations, and individuals. Because TEFAP is considered supplemental food, food pantries that use it also have to receive donations. Donations provide pantries with food that comes with fewer rules about how it is distributed, which makes it easier to respond to emergency demand. Pantries receive food through informal and formal relationships with corporations and individuals. Some churches engage parishioners who donate cash and food. Faculty and staff donate food to the school pantries. A religious group brings day old bread to St. Vincent de Paul's pantry. Many pantries get food from food drives (their own or hosted by partner groups) and purchase food with cash donations. Rutgers Against Hunger, a university effort that collects food and cash during the year and gathers food when students move out at the end of the semester, donates food and cash. The Puerto Rican Action Board (PRAB) and the New Brunswick Public Schools hold in-house food drives. And at least one school holds in-house food drives to support M.C.F.O.O.D.S..

Gardens

At least two food pantries, Christ Church and Suydam Food Pantry, established gardens to grow produce to expand their ability to distribute fresh produce. Creating pantry gardens is an innovative way of getting more fresh produce to guests, without the need for additional refrigerator space.

Types of Food Distributed

Pantries regularly receive and distribute canned vegetables, fruit, pasta, meat and tuna/other fish, soup, boxed pasta, cereal, rice, sauce, peanut butter, jelly, milk, and canned beans (e.g., garbanzo, pinto, black).

They occasionally have dried beans. Only some pantries distribute fresh produce and refrigerated and frozen food. The larger pantries that use federal and state food can receive and distribute refrigerated and frozen products if they have enough capacity to store them. Refrigerated products include fresh vegetables, fruits, hummus, yogurt, condiments, cheese, milk, eggs, and prepared foods. Frozen products include frozen vegetables, meat (poultry, red meat, pork, and fish), and fruit. Pantries also receive shelf stable complete meals which many save to distribute to people who are homeless and those without kitchens. Most pantries distribute bread which M.C.F.O.O.D.S. has a plentiful supply of and some pantries receive it from other sources as well. The Bayard Street Presbyterian Church for example collects loaves of bread because they do not require refrigeration and can be distributed on Saturday. Most pantries pick up fresh produce at M.C.F.O.O.D.S. on Wednesdays, which needs to be distributed quickly because the pantries lack sufficient cold storage and or the produce is often ripe.

Some pantries find a mismatch between the produce they receive and the produce guests want. Many guests want potatoes, onions, and tomatoes and are less interested in winter squash and spinach. Winter squash transports well, has a long life, and has become a useful fall emergency food system donation but some guests are unfamiliar with it.

Table 6. Type of Foods Pantries Distribute

Pantry Name	Dry Goods	Produce	Refrigerated	Frozen	Bread
Bayard Street Presbyterian Church					
Christ Church Episcopal					
Deliverance Prayer Revival Tabernacle					
Ebenezer Baptist Church					
Elijah's Promise					
Emanuel Lutheran					
Five Loaves Food Pantry at Second Church					
Greater Brunswick Charter School					
NB Housing Authority					
NB School Based Youth Services Paul Robeson and Middle School					
NB School Based Youth Services Roosevelt School & Lord Stirling					
PRAB - Service Access Center Representatives					
Rutgers Student Food Pantry					
Salvation Army		NA*	NA	NA	
Society of St. Vincent DePaul					
St. Alban's Church Food Pantry	NA	NA	NA	NA	NA
Suydam Street Reformed Church		NA	NA	NA	NA
Tabernacle Baptist Church		NA	NA	NA	NA

^{*}NA = not available

Food-Related Challenges

While pantries receive many desirable foods, pantries also receive too much or too little of other foods. In general the pantries would like more rice and beans, fresh produce, and to be able to purchase more nutritionally dense foods consistently from Community FoodBank of New Jersey. Pantry directors also asked for increased notice about what to expect in each allotment and more consistency which they thought would allow them to better plan their non-Community FoodBank of New Jersey food purchases. A few pantry directors mentioned that sometimes they do not always receive what they expect to receive from the CFBNJ. Some pantries mentioned that some of the produce they receive is spoiled. And some foods are often left behind by pantry guests or are challenging to carry home such as cranberry sauce, whole wheat pasta, and foods in restaurant-sized containers.

Many pantry directors are concerned with the connection between the food products they provide and guests' health, but what pantries can distribute depends on what they receive. A few pantries mentioned requests for food related to health concerns such as diabetes, hypertension, and gluten sensitivity. Many pantry directors would prefer to get bags of dried beans and most would like to provide more produce but acknowledge it is hard to distribute fresh produce before it goes bad, in part because it is often very ripe when they receive it. Nearly all of the pantries do not provide desserts and sugary drinks although some limit sugary snacks. Some turn these items away but others do not because they fear that they will lose future donations.

Food Distribution Approach

The coordinator or volunteers at almost all of the pantries decide what foods guests receive, prebagging the food for the guests to pick up. Some pantries follow nutritional guidelines and include a variety of products in the bags. For others, contents depend on what food is available each week. The pantries that do not pre-bag items provide guests with options, and guests make their own selections, which is often referred to as a "choice pantry." Some pantries adjust foods for people with dietary restrictions for health or religious reasons but that is not easy because pantries often do not receive foods that meet customer needs such as items with low salt content. During interviews with the guests, some mentioned that they often cannot eat some of the food included in each bag, and will leave behind the food they cannot use. Some of the pantries have a table available for guests to leave their unwanted food.

Choice Pantries

Bayard Street Presbyterian, Paul Robeson School, New Brunswick Middle School, Tabernacle Baptist, and Five Loaves Pantry allow guests to choose foods, often from within categories. Bayard Street lays out two bins of soup, one bin of vegetables and fruit, one of protein (tuna, peanut butter, beans), and one bin of pasta. Guests walk down the line of bins and make selections according to guidelines posted on signs (e.g., take two cans of vegetables). Guests at the Paul Robeson School pantry select dry goods from a small pantry closet and fresh produce from tables in the front of the school. Five Loaves runs a client choice program based on a point system. Items from different food groups have different point values and there are points for protein, vegetables, fruit, legumes, cereals, rice, and "goodies for the kids." Guests are also given bilingual shopping cards that explain a shopping list that constitutes a nutritionally balanced diet. If people cannot get down the stairs to the pantry, volunteers tell guests what products are available.

Some directors of pantries that use the traditional bagging method discussed concerns about adopting a client choice approach. Most pantries lack the space to allow people to move through the pantry to "shop." Several feared that the pantries would need to be open many more hours because it would take longer for people to select their own food. And increasing pantry hours means that they would need more volunteers. Pantry directors were also concerned about their ability to maintain a diverse supply of food through the month and to ensure an equitable distribution of the food they receive.

Bagged Food

Each pantry provides a different mix of food in their prepared bags. Christ Church and Emmanuel Lutheran try to include bread, meat, and vegetables. St. Vincent de Paul develops a menu for their bags at the beginning of the month and what shows up on the menu depends on donations, the federal and state food allotments, and what the pantry purchases. One 5-6 item menu is created for single individuals while a 10 item menu is created for families. The pantry may supplement a large family with a "family plus bag." Their bags often include rice, cereal, protein, vegetables, fruit, and a snack.

Table 7. Examples of Typical Bag Composition at Two Pantries

Christ Church Food Pantry September 2015	St. Vincent de Paul Family Bag November 7, 2015	
Twice a month	Once a week	
NA	Single person: 1 bag; family: 2 bags; family plus: 2 bags plus a package	
1 box cereal	1 box cereal	
1 box milk	1 box of pasta	
1 can fruit	1 pkg of rice	
1 can/pouch vegetables	1 snack (granola bars)	
1 pkg rice	1 jar peanut butter	
1 can beans	1 jar jelly	
1 can spaghetti & meatballs	1 jar nutella	
1 box pasta	1 pouch/can of corn	
1 can tuna fish (until gone), then 1 jar peanut butter	1 pouch of tomato sauce	
1 pkg mac & cheese	1 can of applesauce	
1 odd ball or snack	Bread until gone	
Bread/cherries frozen or dried	Choice of fresh products until gone including: bagels, cream of	
1-2 people get eggs or small pork product/ 4 or more get large pack chicken quarters or whole chicken	broccoli soup, hummus, salsa, yogurt dip, cheese, lemons, pears, apples, grapes	

Pantry Foods Distributed in 2015

To learn more about what pantry guests receive during a year, the research team entered and coded all of the foods St. Vincent de Paul distributed in single and family bags over the course of 2015 into a spreadsheet. The team found that every "family" bag included pasta, a snack, and canned or frozen vegetables. Every "single" bag included pasta and canned or frozen vegetables. St. Vincent De Paul distributed pasta, vegetables, and snacks in 8 of 10 single bags and pasta, snacks, beans, vegetables and macaroni and cheese in 8 of 10 family bags. Canned or frozen vegetables were most often green beans, corn, mixed vegetables, peas, spinach, and carrots. Snacks included snack cakes, cookies, chips, and crackers. Fresh produce most often was potatoes, onions, apples, carrots, lettuce, strawberries, tomatoes, oranges, corn, broccoli, and cucumbers.

Table 8. St. Vincent de Paul Single and Family Bag Contents, 2015

Single Bags, 2015 (Frequency by Units)	Family Bags, 2015 (Frequency by Units)
At Least 8 in 10 Bags Contain	At Least 8 in 10 Bags Contain
Pasta	Pasta
Canned or Frozen Vegetables	Snacks
Snacks	Frozen or Canned Vegetables
At Least 4 in 10 Bags Contain	Macaroni and Cheese
Oatmeal	Beans
Soda, Flavored Water, Juice	At Least 4 in 10 Bags Contain
Ready Meals	Canned Soup
Canned Tuna	Soda, Flavored Water, Juice
Water	Rice
Ramen	Canned Tuna
Canned Soup	Bread
Black Beans	Pasta Sauce
Applesauce	Fresh Produce
Cranberry Sauce	
Fresh Produce	

Pantry and Guest Perspectives on Food

We asked pantry guests about the foods pantries distribute, how the guests use the foods, what percentage of food the pantry provides for their household, how many people they feed with it, what they like to cook and about their favorite meals, and what other ingredients they buy from stores. While some interviewees get most of their food from food pantries, others estimate that they get around a quarter of their household's food from pantries. Some emphasized that they only take what they need at the pantry and that they return anything they would not use. People use pantry ingredients to cook these meals:

- Stews, Locro (thick stew from the Andes)
- Ceviche
- Dominican rice and beans with chicken
- Salads
- Baked chicken with green beans, onions and tomatoes (sofrito)
- Mole de pollo
- Pulled pork

- Stuffed chile peppers (children love it)
- Pata, broth
- Soup with noodles for children
- Ceviche de concha
- Corvina
- West African yellow rice
- Soup

To supplement the food that they get from the pantries, our respondents report that they buy:

- Vegetables: yucca, green plantain, onions, peppers, tomatoes, carrots, celery
- Fruits
- Grains: rice
- · Cooking oil, sugar, flour, spice
- Cereal
- Dairy: milk, eggs, and butter
- Legumes: black beans, canned navy, pinto, and garbanzo beans
- Meat: meat, mondongo (animal insides of some sort), tripe, pigs or cows feet

Some people asked for more fresh fruit and vegetables. Some mentioned that they would like these because they and or their family members have diabetes or hypertension. Pantry guests also would like:

- Milk (cereal but no milk)
- Cheese
- Yogurt
- Orange juice

- Meat
- Aji poblano
- Eggs
- Butter

Challenges Using the Food that Pantries Distribute

Limited Storage and Cooking Facilities and Equipment

Many of the food pantry guest interviewees have full kitchens, working kitchen equipment and food storage and preparation areas, but some guests share housing and lack the space to store and cook certain foods. New Brunswick's housing stock is predominantly renter occupied (76.1%). Overcrowding is defined

as when the number of people living in a house is greater than the number of rooms. According to 2013 ACS estimates, 17.2% (± 1.9%) of New Brunswick households are overcrowded (US Census Bureau, ACS 2009-2013, Table B25014). The four tracts with greater than 17% estimated overcrowding, 53, 56.01, 56.02, and 58, are tracts where Hispanic residents make up at least 70% of the population. Sharing apartments may make it more difficult to store, cook, and eat food.

Some of the interviewees rent a room and have a microwave and refrigerator but lack places to store food, especially refrigerated and frozen foods. Some people have access to a full kitchen but because they share a home they do not feel comfortable storing food and or cooking it. However, many people know how to cook, and when we asked if they would be interested in teaching other people how to make their favorite meals, nearly everyone said yes, and some did so enthusiastically. Some reported that this kind of teaching goes on informally at the food pantries already, where guests share cooking ideas and helpful hints. One interviewee noted that she only has a microwave to cook her food, and although it took her a year to teach herself how, she now makes delicious chicken and pork in the microwave. She was particularly open to the idea of teaching others, as she would love the opportunity to cook in a full kitchen and have browned meat that she cannot get in the microwave.

As pantry staff learn about their guests and their circumstances, they sometimes adapt the foods they provide. For example, most pantries now provide chickens instead of turkeys at Thanksgiving, which are easier to store and can be cooked in smaller ovens and for shorter periods of time, at less expense. In addition, some pantries regularly serve homeless residents and set aside cans with pop-top lids for people who lack kitchen facilities.

Unfamiliar Foods

Pantries describe a mismatch between the food they get and the food their guests know how to use. Finding culturally appropriate healthy food consistently is an ongoing challenge. For example, dried black, pinto or red beans, canned or frozen vegetables, and rice and cereal are sometimes in low supply. Meanwhile pantries receive foods that some guests are unfamiliar with such as blueberries, holiday items such as cranberry sauce, mashed potato flakes and stuffing mix, and tricolor or whole wheat pasta. Additionally, some customers do not eat pork. Some interviewees mentioned that they taste new foods and try them out in new ways. A couple of interviewees report that they look on the Internet to learn how to use unknown foods in recipes, and use the Food Network website and YouTube for recipes (see Table 9).

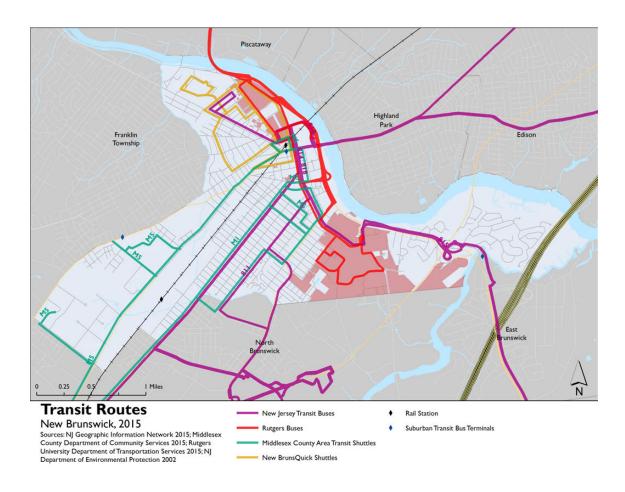
Table 9. Select Food Pantry and Client Food Preferences

Name	Food Pantries Would Like More Of	Food Pantries Receive Too Much Of	Foods Some Guests Do Not Take	Foods Guests Want
Bayard Street Presbyterian Church Pantry	Nutritious Food	Snacks	Yams, Pumpkins, Restaurant Sized Items	
Christ Church Episcopal	Dried Pinto Beans		Cranberry Sauce, Grits, Garbanzo Beans	Meat, Milk, Eggs, Cereal
Deliverance Prayer Revival Tabernacle	Meat, Chicken, Turkey, Frozen Vegetables, Produce		Squash, Yogurt, Pork	Chicken
Emanuel Lutheran	Fresh Milk, Eggs, Produce, Frozen Fish, Canned Food with Less Sugar and Less Salt		Whole Wheat Pasta, Frozen Blueberries	
Five Loaves Food Pantry at Second Church	Rice, Cereal	Grapefruit Juice	Pasta, "Ethnic" or Gourmet Sauces, Tri- color and Whole Wheat Pasta	Rice, Black Beans, Eggs, Milk
Friends of Greater Brunswick Charter School		Dusty, Expired, Odd, Chicken Noodle Soup	Unusual Creamy Soups, Large Packages, Food Past Sell by Date	
PRAB - Service Access Center Representatives	Canned Goods: Soup, Vegetables, Corn; Bread, Eggs, Staples			Fruit, Vegetables, Bread, Non-Perishable
Society of St. Vincent DePaul	Chicken, Milk, Cereal, Mac and Cheese, Beans, Soup	Matzo, Cranberry Sauce, Stuffing, Instant Mashed Potatoes	Cranberry Sauce, Peanut Butter, Whole Wheat Pasta, Butternut Squash, Jelly	Black Beans, Rice

A few pantries introduce people to new foods through tastings at pick up time, and some have noticed that parents sometimes take culturally unfamiliar products such as peanut butter when their children are there to persuade them. In some cases, pantries asked the Community FoodBank of New Jersey not to send items such as cranberry sauce as they had an excess of it. In 2011, The Greater Brunswick Charter School Food Pantry held a pantry potluck event to encourage guests to use some of the healthier foods that were accumulating in the pantry, specifically brown rice and whole wheat pasta. The goal was to provide recipes explaining how the foods could be used, and to give everyone a chance to taste those foods prepared in culturally familiar dishes. Guests wrote down the recipes they used and shared copies. On that same night, SNAP-Ed provided nutrition education for the families, and NJ Learning to End Hunger, a group of Rutgers students trained to do SNAP enrollment screening, conducted SNAP screening for approximately ten families. In addition, fresh produce was distributed in the pantry, and babysitting and ESL classes were provided. The event was a success because it was more than simply distributing recipes for these healthy less popular foods, it was a meal and related activities that provided an opportunity for families to come together to try the foods in a festive atmosphere. To guide donations toward more desirable and/or nutritious foods, some pantries have developed guidance for food drives to get more donations of food that households will use.

Travel

Many of New Brunswick's food pantries are located in and around downtown New Brunswick. People use a variety of transportation strategies to get to them. Some people drive or share rides with a family member or "someone they know." Those without rides walk, take the bus, or use a taxi. One individual walks 40 blocks to a pantry when he lacks a ride. Using the bus on Saturdays is challenging because it does not come as frequently. One interviewee who walks to and from a pantry mentioned that he stopped coming for awhile because it was too difficult to carry the food home. Once he got a grocery cart, he returned.



Non-food Programs and Items

Twelve pantries offer non-food services or items. Case managers at school pantries help connect families with other programs. A few pantries provide rental and utility assistance; PRAB operates a home energy program for low-income residents, and a few pantries distribute hygiene supplies, detergent, diapers, and coats. Christ Church offers books to children who accompany their parents to the pantry. Many pantries also host Rutgers social work students who provide support (see Table 10).

Table 10. Other Services and Products Pantries Provide

Name	Non-Food Products	Other Services
Bayard Street Presbyterian Church Pantry	Shampoo, soap, deodorant, razors, coats, bibles, clothes, diapers, cash	PRAB staff talk about social services; flea market; clothing
Christ Church Episcopal	Books	Social Work intern, men and women's health, utility aid
Deliverance Prayer Revival Tabernacle	Only when M.C.F.O.O.D.S. provides notebooks/ binders, toothpaste, shampoo	
Ebenezer Baptist Church	Clothes, toiletries when available	SNAP-Ed, HIV testing
Elijah's Promise		
Emanuel Lutheran	Diapers, toiletries when available	
Five Loaves Food Pantry at Second Church	Diapers	SNAP-Ed presentations
Friends of Greater Brunswick Charter School	Hygiene products when available, clothing, free bench where people leave and take things	SNAP Ed, dinner accompanies many programs
New Brunswick Housing Authority		Housing
New Brunswick School Based Youth Services: Paul Robeson and Middle School		Case management
New Brunswick School Based Youth Services: Roosevelt School & Lord Stirling		Case management
PRAB - Service Access Center Representatives	Home energy programs, clothes line, diapers, toothpaste, toothbrushes, deodorant, mouthwash	SNAP-ed presentations, information with healthy recipes
Rutgers Student Food Pantry		
Salvation Army Family & Community Emergency Services	NA	NA
Society of St. Vincent DePaul	Toothpaste, toothbrushes, moisture creams, soap, detergent	Some emergency services
St. Alban's Church Food Pantry	NA	NA
Suydam Street Reformed Church*	NA	NA
Tabernacle Baptist Church	NA	NA

^{*}NA=not available

Conclusion

New Brunswick is home to a variety of pantries that include large high capacity pantries as well as smaller efforts that provide food often in emergency situations. Food pantries leaders work together through the Feeding New Brunswick Network and have sought to increase the capacity of New Brunswick's emergency food system.

Ideas for the Future

Interviewees offered a number of suggestions to improve the food pantries.

Pantries

Common Physical Signs and Logo: Feeding New Brunswick Network could create a uniform logo to be displayed on signs or window decals. Uniform signs make it easier to locate pantries from the street.

Reusable Bags: Five Loaves Food Pantry would like to incorporate reusable bags to reduce waste and make it easier for people to bring food home.

Recipes and Cooking Demonstrations that Use Food Pantry Ingredients: Expand the existing cooking programs such as Elijah's Promise's Let's Cook program to create interesting, appealing, and culturally appropriate healthy meals using food pantry and other ingredients. Host cooking demonstrations and opportunities to taste the food at pantries during pick-up time. Engage pantry guests in these efforts.

Food Pantry Pick Up Location Improvements: A few pantries would like to improve the places where they distribute food. For some this means increasing or better using space and for others it means making places function better and look more appealing to customers. Pantry guests would like indoor places to wait.

Storage Limits: To expand pantry capacity, expand dry, refrigerated, and frozen storage.

Pantry Hours: Some pantry guests asked for more flexible pantry hours that include expanded hours on Saturday afternoons and during the evenings.

Community Food Bank of New Jersey

Pantries asked that the Community FoodBank:

- Expand nutritionally dense food choices on the co-op list
- Improve consistency in food allotments and provide more advance notice of what pantries will receive week-to-week
- Consider opportunities to expand the flow of fresh nutritionally dense foods to pantries and strategies to get more fresh produce to pantries quickly
- Consider strategies to enable food pantries to purchase or pick-up fresh produce without traveling weekly to Hillside

Feeding New Brunswick Network

Technology and Choice: Most of New Brunswick's pantries do not have space for guests to shop. Pantries could integrate technology that allows guests to select foods within categories. Arranging visits to choice pantries in the metropolitan area could allow pantry directors to learn how other pantries organize similar programs.

Mentoring: Some smaller pantries would like to expand their services but are not quite sure how to do so. Perhaps more established pantries could "mentor" smaller pantries to learn about refrigeration and freezer space, grant money, and Community FoodBank of New Jersey allotments.

Coordinated Referral Resource: Rutgers University Social Work students and pantry staff could provide or make available information about other programs to pantry guests. The Advancing Community Development class produced a food pantry resource guide with information about how to access other forms of assistance which could be shared widely.

Code Blue Events and Emergency Planning: Work with Middlesex County to meet the demand for food during Code Blue events.

Food: Some pantries would like more healthy food options, refrigerated and frozen foods, fresh produce in good condition, fewer condiments, and foods that can be prepared without a full kitchen.

- Partner with the New Brunswick Community Farmers Market to develop a program to purchase and distribute market bucks.
- Create a New Brunswick food pantry preferred donations list perhaps in partnership with Chandler Health Center, RWJ, SNAP-Ed, and FNBN.
- Create partnerships with New Brunswick stores to glean food and formula.
- Consider expanding fresh produce access through a partnership with Farmers Against Hunger.

Understanding Pantry Guests: Pantry systems in other cities have created heat maps to show where demand for emergency food is most concentrated. If New Brunswick pantries collaborated by sharing customer data, they could see how many people visit multiple pantries and how often and where people live. They could identify the people with the greatest need and provide outreach and case management services using an approach similar to the Camden Healthcare Coalition's efforts to provide support to people who need the most assistance.

References

State of New Jersey, Department of Agriculture. (2013). TEFAP Operations Manual. Retrieved from http://www.cfbnj.org/_assets/library/2013/09/TEFAP-PANTRY-Operations-Manual-Sept-2013.pdf

United States Census Bureau. (2013b). American Community Survey 5 Year Estimates 2009-2013.

United States Department of Agriculture, Food and Nutrition Service. (2015b). Commodity Supplemental Food Program (CSFP). Retrieved from http://www.fns.usda.gov/csfp/commodity-supplemental-food-program-csfp

United States Department of Agriculture, Food and Nutrition Service. (2015d) Food and Nutrition Service Nutrition Program Fact Sheet: Commodity Supplemental Food Program. Retrieved from http://www.fns.usda.gov/csfp/eligibility-how-apply

Chapter 9. Food-related Education

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A variety of organizations in New Brunswick provide food, nutrition, and cooking education. Although many work together formally and informally, we know of no central repository of educational curriculum, materials, and information about food-related assistance or of an opportunity for these educators to meet periodically to share resources and schedules. In this report, we briefly describe each of these organizations and their work in New Brunswick.

Food-related Education Organizations

NJ SNAP-NJ

SNAP-Ed disseminates information about nutrition and physical activity through formal education programs in schools and community-based organizations and informal instruction in waiting rooms, classrooms, schools and community-based organizations, and also by video and social media to communities in which most members are SNAP recipients. SNAP-Ed administers specialized programs for groups of SNAP recipients; paraprofessionals provide 30-45 minute education programs over six weeks. They offer classes at the Greater Brunswick Charter School and in all New Brunswick schools except the Middle School. SNAP-Ed works with 3rd, 4th, and 5th grade students in the elementary schools, 6th grade students at McKinley School, and 8th grade students in health classes at the New Brunswick Charter School.

SNAP-Ed also offers a set of programs that target other groups of people:

- Faithfully Fit encourages mobility through faith-based organizations.
- Select to Protect helps children and parents increase calcium intake.
- Rev it UP is offered for teen groups and at teen recreation centers.
- SNAP-Ed also offers adult and mini-courses at the Adult Learning Center, Family Success Center, WIC offices, food pantries, and houses of worship. Participants attend at least six of eight classes to accommodate tight participant schedules. SNAP-Ed partners with the New Brunswick Community Food Alliance and Robert Wood Johnson University Hospital to offer nutrition and cooking classes at the RWJ Fitness and Wellness Center for large groups of 40-50 adults. In addition, it brings cooking classes to schools and religious institutions.

SNAP-Ed also creates recipes and provides nutritional testing to generate nutrition facts labels for their recipes. While SNAP-Ed does not enroll people in SNAP, it can work with the Community FoodBank of NJ and SNAP staff who do this.

4-H

The Rutgers Cooperative Extension's New Brunswick 4-H program encourages responsibility and community involvement in youth, especially middle school and high school students. The program empowers youth in health, nutrition, and gardening. Each year 4-H works with more than 200 children and youth in New Brunswick public schools, afterschool clubs, and summer programs. 4-H has worked with the Greater Brunswick Charter School garden every summer for the last 4 years. They offer two afterschool enrichment 10-week clusters about the Science of Soil and Health and Nutrition.

The New Brunswick chapter's 4-H Green Titans Teen Council has brought attention and innovative techniques to community gardening. The council is conducting soil safety and compost trainings in Spanish to involve more residents in community gardening and to support them for long-term gardening success.

4-H also:

- Works with Get Moving-Get Healthy program at Livingston School, Lord Stirling, and the Middle School.
- Collaborates with Afterschool, Spring and Summer break program at Youth Empowerment Services in which they teach about healthy living one hour each week for three weeks.
- Offers a Spring break 6-hour class using the 4-H Choose Health, Food and Fitness curriculum at the Salvation Army.
- Collaborates with SNAP-Ed, the Public Library and RWJ Hospital to feed children at the library's healthy family night.

Nurture thru Nature (NtN)

Nurture thru Nature (NtN) is a health and nutrition education program that teaches New Brunswick school students about science through urban agriculture and experiments. NtN is a partnership between Rutgers University, Johnson & Johnson, New Brunswick Public Schools, and the New Brunswick Education Foundation. NtN is offered as a summer and afterschool program for students in 4th to 9th grades. It provides students with hands-on experience in the NtN butterfly garden, vegetable garden, pond, and indoor nature classroom. Students receive a healthy snack each day (Rutgers University, 2015).

Robert Wood Johnson University Hospital (RWJUH)

In addition to working with SNAP-Ed, as mentioned above, RWJUH provides nutrition education for other populations, especially children. RWJUH offers Project Inspire, which is a short camp about nutrition and exercise and includes grocery shopping and hands-on games for children with diabetes. RWJUH has offered these programs during school spring break, on Saturdays and over the summer. The spring break program ran for 5 days at the RWJ Community Health and Wellness Program Fitness and Wellness Center for children ages 10-14 (City of New Brunswick, 2015). RWJUH also works with New Brunswick Girl Scouts to support their work to earn healthy eating badges.

Elijah's Promise

Elijah's Promise helps to improve community health and, over the past two decades, has offered multiple programs. "Let's Cook" provides free hands-on evening cooking and nutrition education classes to 10-15 low-income community members including children. Instructors teach people how to cook nutritious, easily reproduced, family friendly meals on a budget with few ingredients. The meals are based on seasonally available fresh produce and recently included homemade whole wheat pizza, stir fry chicken, lentil and

butternut squash soup, and healthy carrot muffins. The four-week classes offer instruction in sanitation, knife skills, and simple preparation methods. NJ-SNAP nutritionists collaborate with the chefs to teach basic food handling techniques and how to read food labels and moderate consumption of fat, sugar, and salt. Participants bring home the meal they prepared along with the recipe. Elijah's Promise reaches out to community members about the program through word of mouth, flyers around the library, the adult education center, and other nearby places (Y. Molina, personal communication, February 14, 2016).

WIC Education

The Special Supplemental Nutrition program for Women, Infants and Children (WIC) provides nutrition education to improve dietary habits to improve birth outcomes and healthy lifestyles at WIC offices. This includes supporting and encouraging breastfeeding. WIC participation is income-based and provided to pregnant women, and children younger than five and their mothers (P. Arora, personal communication, January 12, 2016).

FoodCorps

FoodCorps is a national nonprofit organization that places service members in communities to connect children and youth to healthy food through nutrition education, hands-on gardening, and food preparation activities. FoodCorps members partner with schools and work with three "tools:" knowledge, engagement, and access. This includes improving knowledge about food and nutrition, engaging kids in hands-on activities such as gardening and cooking and giving children access to nutritious meals on their lunch trays. FoodCorps members receive professional training which includes earning ServSafe certificates.

During the 2014-15 program year, New Brunswick's FoodCorps service member served with the New Brunswick Community Farmers Market and provided support in building gardens, teaching about food and nutrition, and increasing access to fresh fruits and vegetables in grades pre-k through high school. In addition, the FoodCorps service member worked with children at Greater Brunswick Charter School, YES Catholic Charities Early Learning Center, PRAB, Middle School, and the High School. In partnership with Youth Empowerment Services, the FoodCorps member led hands-on gardening lessons with 4 and 5 year old children at the Esperanza community garden where children planted, cared for, and ate the food they grew. FoodCorps also worked with PRAB Raritan Gardens. Students in that program walked to the nearby New Brunswick Community Farmers Market where they saw live chickens, did a garden scavenger hunt, played a game called sunlight and moonlight, talked about photosynthesis and tasted blueberries. Parent and staff volunteers received \$5 in market bucks and children took home nectarines.

FoodCorps also taught an "All About Food" class with Greater Brunswick Charter School students in the 6th, 7th, and 8th grades that met three times a week for fifty minutes. The class combines food and nutrition education with hands on cooking demonstrations and students experiment with gardening, cooking, and waste management. Recipes focused on foods that resonate with youth such as black beans and rice, hummus, chorizo and eggs, veggie tacos, and rainbow smoothies. FoodCorps members report that children enjoyed foods that you can turn into dips, smoothies, and food that comes in appealing colors and asked to make empanadas and quesadillas. FoodCorps introduces students to new foods in the classroom and by serving food samples in the cafeteria. FoodCorps members also work with young children at the Greater Brunswick Charter School and in afterschool programs. As a FoodCorps member explained: "We planted lettuce and other leafy greens with the kindergarten which they loved and it's right by their playground and they saw it sprouting. Afterschool groups can join and there's a garden cluster and they took over the lettuce and leafy greens and harvested it" (T. Reyes, personal communication, January 5, 2016).

New Brunswick High School Culinary Arts Program

New Brunswick High School offers a culinary arts program for students in a full kitchen, which allows them to improve cooking skills and nutrition knowledge. Beginner and advanced courses are open to juniors and seniors. The culinary program provides an in-house catering service called the "Zebra Cafe" (Bradshaw, 2012).

References

Bradshaw, Jennifer. (2012). NBHS culinary arts program teaches students work and home skills. *New Brunswick Patch*. Retrieved from http://patch.com/new-jersey/newbrunswick/culinary-arts-program-teaches-students-work-and-home-skills

Buckley, Elizabeth. (2013). New Brunswick, NJ 4-H Gren Titans Teen Council- Soil Safety, Composting Program. Grant Proposal. Retrieved from https://docs.google.com/document/preview?hgd=1&id=1GO3M0_ZXIv0kPbC0agM35d3LT_skGUtxk6D3q0rJFjw.

The City of New Brunswick. (2015). Project Inspire at Robert Wood Johnson Fitness and Wellness Center. Retrieved from http://thecityofnewbrunswick.org/event/project-inspire-at-robert-wood-johnson-fitness-and-wellness-center/2015-04-08/

New Brunswick 4-H. (2015). New Brunswick 4-H. Retrieved from http://newbrunswick4h.wix.com/nb4h.

Rutgers, the State University of New Jersey. (2015). Nurture Thru Nature. Retrieved from http://ntn.rutgers.edu/

Chapter 10. Food and Community Economic Development

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Food is increasingly tied into community development and community economic development approaches to poverty alleviation and urban revitalization. Organizations in New Brunswick link food to job training, business development, job creation, and wage improvement. In this chapter, we discuss some of these efforts including an interest to expand support for small food businesses, interest in farming as a small business, and efforts to minimize wage theft in food businesses.

Growing Small Food Businesses

The New Brunswick Community Food Alliance's Food Economic Development work group has been exploring the potential to create a community food incubator and identified commercial kitchens in and near New Brunswick. The New Brunswick Community Food Alliance's Advocacy and Policy work group explored the potential to create food vending businesses in New Brunswick. Elijah's Promise rents space in its commercial kitchens to support small food businesses and its Promise Culinary School provides culinary job training. The Intersect Fund, a micro-credit organization supports small businesses with food and other business development assistance. Elijah's Promise community food organization and Unity Square community organization created Corazon Kitchen, a small food business, that was housed at Unity Square's community center. The community organizations trained people to produce food and, for a few years, ran a small food business that sold a variety of products including empanadas, mole, a spice rub, alfajores (cookies), and Calavera candy (sugar skulls for Dia De Los Muertos) at the New Brunswick Community Farmers Market in downtown New Brunswick and at Elijah's Promise's short-lived Better World Market (Makin, 2014; Bradshaw, 2013). Though Corazon Kitchen stopped producing when A Better World Market closed, the entrepreneurial food business spirit lives on in New Brunswick. With a Kresge planning grant, Elijah's Promise is building on its past experiences to expand the potential to support small food businesses (Elijah's Promise Facebook). Finally, Middlesex County College supports entrepreneurial development.

Food Entrepreneurs in New Brunswick

To learn more about the kinds of services and facilities community residents need to expand their food business efforts, the research team interviewed 14 residents who make food that they sell to other people or would like to start a food business. The research team asked the current and potential food entrepreneurs about the kinds of foods they cook or would like to cook, the challenges that they face in running and or expanding their businesses, and the sorts of assistance that would be most valuable to them. We also asked about their interest in using a shared commercial kitchen space, the amount of time and time of day they would need to use it and how much they would be willing to pay.

What Foods Entrepreneurs Make

Interviewees with small food businesses, some of which are related to restaurants, make a variety of foods. Some interviewees, those who make food to sell currently as well as those who would like to, specialize in food from particular geographic regions or entire countries such as Ecuador, Mexico, or the Dominican Republic. Many of them specialize in particular items that include: barbacoa, champurrado, chicken, collard greens, empanadas, enchiladas, fruit, fish, jerk rice, mac and cheese, meatballs, mole, partas, pasta salad, pasteles, perniles, plantains, pork ribs, pozole, roast pork, quesadillas, rice, rice with green beans, seafood soup, soft tacos, spicy chicken, steak, tamales, tacos, and tepache.

Food Carts, Trucks, and Restaurants

The entrepreneurs who currently operate food businesses would like to expand existing businesses by increasing the number of guests. In addition, they would like assistance in reaching out to new guests. Some interviewees have thought about running a food cart or food truck. A couple with restaurant experience would like to open their own brick and mortar restaurant.

Commercial Kitchen Space and Equipment

Commercial kitchen space that is subject to regulation and inspection by the Department of Health is required to produce food for sale in New Jersey (Food Safety News, 2016). New Jersey is the only state that requires this. To start a new food business or expand an existing one then, entrepreneurs may need to find new or larger commercial kitchen cooking space. However, affordable commercial kitchen spaces are difficult to find and very small scale food entrepreneurs need flexible inexpensive spaces. Of the entrepreneurs we interviewed, most would like and need affordable commercial kitchen space. Most of the interviewees only need a small space such as one that is 8x12 feet and a small table. Most would use it in the early morning, a few starting as early as 5AM, but most would like access from 8AM - 11AM. One is interested in the afternoon, one in the late afternoon, and one on weekends. Most of the interviewees we spoke with need the kitchen space for 4 to 5 hours but a couple would use the space as long as 8 to 10 hours.

These small-scale entrepreneurs cannot afford to pay much rent. Most thought they could pay \$35-\$100 to rent the space per week. How much entrepreneurs are willing to pay varies by their ability to pay and the amount of time they plan to use the space. The variation includes people who could pay very little even if they used the space all week and people who would pay \$25 for a day or \$100 for the week. Though some entrepreneurs prefer to use the space by themselves, most are willing to share the space as long as they have room to work and their co-sharers keep the kitchen clean. Some prefer not to share because of their concerns about food quality and potential contamination. About half need storage space for tools. Most need a small table and refrigerator and or freezer to store food supplies.

Challenges to Expanding Food Businesses

Entrepreneurs mentioned training and certification, money, and time kept them from expanding their food businesses. While some of the entrepreneurs have had basic food training and certification such as ServSafe certifications, nearly all would like to expand what they know about food and sanitation and regulations about selling food in a variety of locations such as at festivals. One mentioned wanting a permit to sell food so that they were certain they were meeting food safety and other health regulations. Some entrepreneurs said that money kept them from starting a business or expanding a current one. A lack of money kept them from buying the equipment they need or more raw ingredients. A few mentioned wanting

assistance with marketing and promotion to reach new guests. Some said that having access to less expensive food ingredients would make it possible for them to create stronger businesses. And some entrepreneurs would like more time. Some make food during the day while their children are at school. Making food is something they know how to do, there is demand for it, and they can balance child and family care with a small business. For these entrepreneurs, expanding their businesses either means some creative balancing or finding before and after school care for their children if producing or selling takes place outside of school hours.

Labor Rights and Wages

New Brunswick enacted two ordinances to improve resident income. One, created in January 2014, addresses wage left to ensure that workers are paid for the hours they work. The other instituted in January 2016 provides paid sick leave (Popp, 2014). Robert Wood Johnson's Community Health Team also worked with Unity Square, Elijah's Promise, and the FarmWorkers Support Group to celebrate Cesar Chavez Day in New Brunswick and bring to light the everyday work and lives of farm workers in South Jersey (Robert Wood Johnson University Hospital, 2016).

New Brunswick passed New Jersey's first anti-wage theft ordinance, which went into effect on January 1, 2014 (Bradshaw, 2014). Wage theft can be described as employers not paying employees for the hours they have already worked, paying less than minimum wage, and or not paying for overtime. The problem of wage theft is significant in New Brunswick. A 2013 study by New Labor found that one in six households in low-wage neighborhoods in the city disclosed that they had been the victim of wage theft at some point during the previous two years, with 85 percent of those respondents saying they were unable to reclaim their lost wages. The city ordinance ties local business licenses to compliance with state wage laws (Kalet, 2014). If a business is found guilty of wage theft by the court or the Department of Labor, the city will not renew that establishment's business license until the full amount of wages owed to an employee is paid. The city ordinance is applicable to the business licenses that New Brunswick issues for restaurants, retail stores, and other registered businesses in the jurisdiction, all of which require annual renewal. By linking business licenses to compliance with employee wage and hour guidelines, New Brunswick has established a more meaningful deterrent and increased the punishment for employers perpetrating wage theft.

The second ordinance, the New Brunswick Paid Sick/Safe Time Ordinance, went into effect on January 6, 2016. The purpose of this ordinance is to allow employees paid time off from their jobs to take care of health and or domestic violence, sexual harassment, or stalking issues for themselves and their family (City of New Brunswick, 2016). Receiving paid sick/safe time means that an employee, part- or full-time, will be compensated at the same hourly rate and with the same benefits as the employee normally earns for hours worked. Guaranteed paid time off protects employees from losing their jobs and or dealing with work discipline when circumstances arise that necessitate sick or safe time off from work. By ensuring the provision of paid time off, New Brunswick aims to promote preventative health care, diminish health care costs, and safeguard the public's welfare and health (City of New Brunswick, 2016). Overall, this ordinance works to ensure a healthier and more productive workforce in New Brunswick (City of New Brunswick, 2016).

The ordinance is applicable to all businesses with 5 or more full-time employees in the city of New Brunswick. Employees are eligible to benefit from paid sick/safe time if they work at least 20 hours per week. Individuals who work between 20-35 hours per week are considered part-time employees and can earn up to 24 hours of paid sick/safe time in a calendar year (City of New Brunswick, 2016). Individuals who work 35 hours or more per week are considered full-time employees and can earn up to 40 hours of paid sick/safe

time in a calendar year (City of New Brunswick, 2016). Employers with 5-10 employees, inclusive of full-time, part-time, and temporary workers, are not required to provide any employee more than 24 hours of paid leave in a calendar year. Unused paid sick/safe time carries over to the following calendar year; however, an individual cannot use more than the maximum, 24 hours for part-time or 40 hours for full-time, in a given calendar year. The ordinance specifically prohibits retaliation against employees who exercise their right to use paid sick/safe time. Employers are subject to fines and wage payment restitution if it is found that an employee was unlawfully denied use of paid sick/safe time or retaliated against for using paid sick/safe time.

Farming

A growing number of programs help residents grow produce in community gardens or on farms. The Northeast Organic Farming Association of New Jersey (NOFA-NJ) runs an incubator Farm Program at Duke Farms in Hillsborough New Jersey (Duke Farms, NOFA-NJ). The Rutgers New Jersey Agricultural Experiment Station (NJAES) offers programs that support new and experienced farmers who grow "ethnic vegetables" (NJAES, 2017). NJAES also provides bee-keeping courses and farm courses (Rutgers Office of Continuing Professional Education, 2017; Rutgers Today, 2016). Some residents would like additional information about how to become a professional farmer. They ask for information about apprentice programs on farms and within academic programs. There is also interest in expanding greenhouse space to support small business development.

Conclusion

Some New Brunswick organizations have existing programs to provide training and support for growing small businesses to expand community economic development opportunities. Other organizations are expanding and or creating new programs. Growing the food economy is an opportunity to provide needed jobs. Interviews with residents and community groups suggest that many residents would like to start food businesses or need assistance with their existing food businesses. Some would like to expand their businesses to sell food through vending or food trucks, and others would like to open restaurants. They would like training in food safety and health regulations, as well as businesses support for things like marketing and business planning. Many of the people who currently make food would be interested in renting commercial kitchen space but could not pay much per week. Many expressed interest in using the space early in the day. They report that making food fits well given their skillsets and the time constraints of taking care of children, and that there is demand for high quality prepared food. Making and selling food may be an especially important community economic development area because more than a third (36% ±3%) of New Brunswick residents over 25 are estimated not to have completed high school, and a quarter (25.5% ±2.7%) have less than a 9th grade education (ACS, 2009-2013).

References

Bradshaw, Jennifer. (2013). Corazon Kitchen brings love to New Brunswick meals. New Brunswick Patch. Retrieved from https://patch.com/new-jersey/newbrunswick/corazon-kitchen-brings-love-to-new-brunswick-meals

Bradshaw, Jennifer. (2014). New Brunswick business warned of penalty under new wage theft ordinance. The City of New Brunswick. Retrieved from http://thecityofnewbrunswick.org/blog/2014/07/31/new-brunswick-business-warned-of-penalty-under-new-wage-theft-ordinance/

City of New Brunswick. Providing for paid sick time and paid safe time leave. Chapter 56 Title 8. (2016). Retrieved from

http://thecityofnewbrunswick.org/planninganddevelopment/wp-content/uploads/sites/8/2015/12/Paid-Sick-Leave-Ordinance-O-121501-Adopted-Signed.pdf

Duke Farms. http://dukefarms.org/Documents/Images/Programs/ClassesAndEventImages/NOFA-NJ%20Beginning%20Farmer%20Program%20Brochure.pdf

Elijah's Promise Facebook. https://www.facebook.com/ElijahsPromise/posts/10153475805726269

Food Safety News. (2016). New Jersey standoff on homemade food sales continues. *Food Safety News*. Retrieved from http://www.foodsafetynews.com/2016/03/new-jersey-standoff-on-homemade-food-sales-continues/#.WVKCMxPyvow

Kalet, Hank. (2014). Taking a bigger bite out of wage theft in the garden state. NJ Spotlight. Retrieved from http://www.njspotlight.com/stories/14/07/17/taking-a-bigger-bite-out-of-wage-theft-in-the-garden-state/?p=all

Makin, Bob. (2014). Community organizers changing hub city neighborhood. *MyCentralJersey.com*. Retrieved from http://www.mycentraljersey.com/story/news/local/middlesex-county/2014/06/16/new-unity-square-community-center-aims-empower/10638353/

New Jersey Agricultural Extension Services (NJAES). (2017). Growing ethnic vegetables in the garden state. https://njaes.rutgers.edu/spotlight/ethnic-vegetables.asp

Popp, Samantha. (2014). New Brunswick resident resolves wage theft case. New Brunswick Today. Retrieved from http://newbrunswicktoday.com/article/new-brunswick-resident-resolves-wage-theft-case-las-cazuelas-restaurant

Robert Wood Johnson University Hospital. (2016). RWJ CHPP Project Inspire, Cesar Chavez Day. https://www.facebook.com/RWJUH/ [Facebook Photo Album]

Retrieved from https://www.facebook.com/pg/RWJUH/photos/?tab=album&album_id=10153585996293137

Rutgers, the State University of New Jersey, Office of Continuing Professional Education. (2017). Beekeeping Courses. Retrieved from http://www.cpe.rutgers.edu/programs/beekeeping.html

Rutgers Today. (2016). How to start a farm. https://www.youtube.com/watch?v=DsCPyEk_3To

The City of New Brunswick. (2016). Paid sick and safe time in New Brunswick. Retrieved from http://thecityofnewbrunswick.org/planninganddevelopment/paid-sick-safe-time-in-new-brunswick/

Weston, Rachel. (2014). Highland Park man makes super hot sauce. *The Star Ledger* http://www.nj.com/cooking/index.ssf/2014/08/gutsy_gourmet_highland_parks_hot_sauce.html

Chapter 11. Community Food Incubation and the Potential to Create Small Food Businesses in New Brunswick

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New Brunswick is home to many current and future food business entrepreneurs. Some are home cooks who would like to start a food business. Others would like to expand their current businesses by selling from a food cart, food truck, or restaurant. Some cooks produce one well developed product such as tamales, pasteles, or empanadas and others cook meals or a variety of products. Many communities are creating food entrepreneurship programs to support cooks like these with the aim of spurring community economic development. Many of these cooks in New Brunswick are low-income and to grow their businesses, they need access to low-cost commercial kitchen space, business support and training, insurance, food safety training and certification, and start-up assistance, among other things. Having access to certified commercial kitchen space is essential because food business entrepreneurs in New Jersey are required by law to make food in certified commercial kitchens. The New Brunswick Food Assessment found that there is demand for commercial kitchen space especially in the early morning hours, that cooks may need space to store ingredients and equipment, that many need freezer and refrigeration space, and that most can spend no more than twenty to one hundred dollars per week to rent space (New Brunswick Community Food Assessment, 2016).

The New Brunswick Community Food Alliance, a coalition of organizations and residents interested in improving community food security, is interested in growing small food businesses. Its Food Economic Development Work Group asked the Ralph W. Voorhees Public Service Fellows to research community food incubators to learn more about what it takes to create and grow existing small food businesses. The Voorhees Fellows are a group of five undergraduate students who conduct community-based research each Fall. To research the Food Alliance's question, we asked:

- (1) What are community food incubators?
- (2) How do incubators support small food business development in their communities?
- (3) What community food incubator-type resources already exist in New Brunswick?

To answer these questions, we researched food incubators in the US. We reviewed the incubators to identify services that would address the needs of New Brunswick entrepreneurs. To compare them we looked at thirty-eight incubators and created a detailed table that outlined the breadth of services each incubator provides. We distinguished between community kitchens and food incubators as community kitchens, we found, often provide a commercial kitchen space in which to work but offer few services. In contrast, food incubators provide a range of business services and may provide a space to cook but they often serve

formally trained chefs and better resourced small businesses. From these thirty-eight incubators, we narrowed down our list to 20 that we felt served people who have low-incomes.

To better understand the existing infrastructure for small food business training in and around New Brunswick, we spoke with and or heard presentations from seven people who are affiliated with these types of programs. We also reviewed academic and practitioner literature. Finally, we used visuals to illustrate many topics including many from Wodka's (2016) study U.S. Kitchen Incubators: An Industry Update, which is the most current study of food incubators. The research included a fifty-four-question survey sent to 250 US shared-use food facilities. The survey received sixty-one responses, resulting in a 24% response rate. While limitations to this study include limited generalizability and sampling and response bias, we believe that the data presented is valuable and presents similar findings to our own research.

Our report identifies and describes community food incubator practices that are common to organizations nationally, how and in what ways incubators combine physical kitchen space and business services, and suggests what is needed to create an incubator in New Brunswick. Our research suggests that to create or grow existing small food businesses, food entrepreneurs need a number of key components. Physical commercial kitchen space is the most basic element and is where products are made. Office space is typically used for marketing and other business tasks. Ingredient sourcing helps entrepreneurs find high quality, low cost ingredients. Business services are important to get the word out to make a profit and include business planning, branding and marketing, and financial literacy education. To make the incubator a reality, networking, cooking classes/lessons, and food development and testing are necessary components.

This report includes an overview of the important parts of a food business incubator. First, we explore the facilities needed to create the incubator including a commercial kitchen and office space. Next, we discuss overall business services. Last, we describe services specific to food businesses.

Food Incubator Facilities and Services

Facilities

The incubator facilities are the first major element of an incubator we will discuss. Most incubators we looked at operate a shared commercial kitchen space and some incubators also provide office space for participants.

Kitchens: The purpose of this section is to describe the necessary components of the physical kitchen space. A kitchen used to produce food for sale needs to be certified for commercial production which means that small food businesses need certified places to cook. Most incubators provide on-site commercial kitchens. Others including Detroit Kitchen COnnect and University of Wisconsin Food Business Incubation Network refer guests to a network of kitchens. The kitchens must meet state and local health and safety codes. Chapter twenty-four of the New Jersey Administrative Code identifies the requirements for NJ commercial kitchens (New Jersey Department of Health and Senior Services). Using a shared commercial kitchen allows cost reduction and maximization of kitchen use throughout the day. The following subsections describe different elements of the kitchen space and logistics.

Kitchen Equipment: Entrepreneurs need access to the proper cooking equipment. The appliances incubators provide vary and depend on user needs. Some incubators allow participants to bring their own, specialized equipment. To demonstrate the typical equipment provided, U.S. Kitchen Incubators: An Industry Update reports that 95% of the kitchens surveyed have convection ovens, 93% have prep tables, and 88% have a mixer (Wodka, 2016: p.8).

Storage Space: Storing the ingredients used in their products can be a major challenge. Storage space is important for entrepreneurs who have nowhere to keep their supplies or would have a difficult

time with transportation. Space can be organized for dry, cold/wet, and frozen storage. The amount of storage space, price, and security varies by incubator. The timeframe for storage use is a consideration as well. In the US, most incubators provide storage space (Wodka, 2016).

Margaret Brennan from the Rutgers Food Innovation Center (RFIC) reports that "you can never have enough storage" (Brennan, 2016). Some kitchens facilitate ingredient deliveries with loading docks. The RFIC facility maintains a storage area which allows producers to store ingredients between production runs. The Starting Block incubator in Hart, Michigan, charges \$10/month for "non-secured dry pallet storage," \$1.50/cubic foot/month in either freezer or cooler storage, or \$8/month to rent a locking cabinet.

Cost for Rental

Incubators use various strategies to decide how to charge for kitchen use. Kitchens can be rented hourly or monthly. Pricing may include storage space. A sliding rental scale varies prices to benefit low-income participants or participants that use the kitchen for more hours/week. Other kitchens have membership fees and/or require security deposits. Rental costs can be subsidized with outside funding.

The Livingston Food Resource Center incubator in Livingston, MT, charges \$12/hour for new entrepreneurs and \$15/hour for established entrepreneurs (Livingston Food Resource Center). The Starting Block targets low-income entrepreneurs and charges \$15/hour for kitchen use (The Starting Block). Both incubators have low rental costs in comparison with incubators serving different demographics. At Union Kitchen in D.C. monthly prices range from \$1,095 to \$4,000/month (Union Kitchen). This reflects the mission of some incubators to serve low-income and/or newer entrepreneurs.

Cleaning

Cleaning is one of the greatest challenges for incubators (Wodka, 2016). It can be unclear how to organize cleaning an incubator kitchen. Cleaning must satisfy county health code and can be the responsibility of the kitchen owners or renters. Cleaning kitchen utensils, countertops, and floors is the responsibility of the kitchen renter in almost all incubators. The cost of cleaning can be included in the incubator's hourly rental price or a separate cleaning fee. If appliances need repairing, either the entrepreneurs or the incubators will hold responsibility for arranging and paying for the repairs. Responsibility for waste removal varies between incubators.

La Dorita Kitchen Share, a nonprofit food incubator in Sharpsburg, PA, charges users a monthly membership fee for cleaning (La Dorita Kitchen Share). Forage Kitchen, an incubator kitchen in San Francisco, has dish-washing staff and offers recycling and composting for waste. Hummingbird Kitchen in Eugene OR and Grow Benzie in Benzonia, MI have kitchen operating manuals online that go into detail about cleaning and maintenance responsibilities (Stellaria Building) (Grow Benzie Kitchen).

Staff

Many of the logistical challenges incubators face could be resolved with more staff. Onsite staff can perform a variety of functions from dishwashing, providing cooking assistance, letting participants into the building, and dealing with equipment issues. Having staff in the kitchen ensures safety and proper use of equipment.

New Brunswick

Access to a kitchen in New Brunswick could look like a stand-alone commercial kitchen or a network of underutilized kitchens in the city. Elijah's Promise has two commercial kitchens and the Unity Square has one. The New Brunswick Community Food Alliance (NBCFA) previously created an inventory of all commercial kitchens, including church, school, and fire house kitchens. The supplies, equipment, storage, and hours of availability for each facility varies. For example, Elijah's Promise uses their kitchens for many programs and the kitchens are only sparingly available for rental throughout the week. And some organizations that have commercial kitchens are likely not interested in using their space for food incubation. The many disconnected spaces lend toward a network setup where entrepreneurs are connected to the kitchen that best fits their needs. In a network setup, all items described in the "Kitchen" section would need to be carefully considered and coordinated for each kitchen in the network.

Office Space

Some incubators include office space that they use for themselves or open to their entrepreneurs. This space may be used for marketing, making advertising materials or labels, storing business materials, training, meetings, and events. Incubators typically provide equipment such as copy machines, computers, internet access, phones, meeting rooms, and desks. Entrepreneurs may be charged for office space as a part of rent or as an additional cost.

Union Kitchen DC's main location has office and conference space where the founders work and manage the incubator (Jacob, 2015). Starting Block in Hart, Michigan provides office space for rent with "computer and internet access, phone and office support" (The Starting Block).

Services

Incubators offer a wide range of general business and food business services, both of which are vital to incubator participants' success. In the following section, we discuss which ones are most important in the early stages of business development.

Business Services

Incubators provide a variety of services, such as financial literacy education, accessing funds, business planning, and branding and marketing assistance. We start with financial literacy education.

Financial Literacy Education

Some incubators provide financial literacy training to teach aspiring entrepreneurs how to manage, earn, and invest money, personal skills that are important for planning and running a successful business. Financial literacy education could strengthen New Brunswick's entrepreneurs' business and personal capacity.

El Pajaro Community Development Corporation in Watsonville, California provides three-hour financial literacy workshops to community members and incubator participants. The workshops teach participants how to track personal expenses and save, use checking and savings accounts, and obtain credit.

New Brunswick

The Piscataway Public Library received a "Smart Investing @Your Library" grant to hold financial literacy workshops on financial check-up, retirement, and investment. They offer these classes at the New Brunswick Public Library and as evening webinars. The library also offers "lunch and learn," financial literacy workshops for businesses. Rutgers offers financial literacy courses to students. The semester-long courses include Personal Finance and Financial Decision-making, and Finance for Personal and Professional Success. Additionally, the New Jersey Agricultural Experiment Station offers online financial literacy resources including programs, assessment tools, a consumer-to-consumer video series, financial education lesson plans, Microsoft Excel financial templates, a financial guide for women, savings challenges, and other resources (New Jersey Agricultural Experiment Station). And, the Intersect Fund provides one-on-one financial literacy coaching (De La Hoz, 2016). This service is described in more detail in the "Access to Funding" section below.

Access to Funding

Connecting entrepreneurs to funding sources is critical to ensuring they can use the skills they learn to grow their businesses. Accessing funds is a vital step for entrepreneurs in building their food businesses. While many New Brunswick entrepreneurs are not interested in owning restaurants, start-up costs for food trucks, consistent vending, and product development can still be high (New Brunswick Community Food Assessment). As 35% of the New Brunswick population falls below the poverty line many individuals looking to start a food business may lack start-up funds (American Community Service, 2010-14).

Incubators often provide assistance to access funding. La Cocina provides free loan and financing assistance for small businesses in the San Francisco community (La Cocina). Hot Bread Kitchen in New York, NY also provides one-on-one coaching to small businesses to grow capital, and to established businesses to develop applications for larger loans (New York City Economic Development Corporation). Delaware State University's Food Business Incubation Center offers loan support through its partnerships with technical business organizations. These partnerships include First State Community Loan Fund, a Delaware based nonprofit specializing in small business growth and development loans, including microloans (Delaware State University; First State Community Loan Fund).

New Brunswick

The Intersect Fund is a local nonprofit that has been providing support to small businesses since 2009, helping low-income, minority, and women-owned businesses access microloans, business and technical assistance and build credit (Intersect Fund). Their loans range from \$100 to \$25,000 and average \$2,500, reflecting the need for small loans that exists in New Brunswick. If guests begin with poor credit or no credit history, the Intersect Fund's credit building programs help guests understand the process and build their credit history to help them access loans in the future. These services are offered to entrepreneurs even if they are initially denied a loan (De La Hoz, 2016). This commitment to community is a cornerstone of The Intersect Fund's programming and one of the reasons they believe their loan loss rate is consistently so low (2.49% in 2012) (Intersect Fund).

Areas of New Brunswick have also been designated as Urban Enterprise Zones (UEZ) by the state. Businesses that participate in the UEZ program can receive benefits such as 50% sales tax reduction on retail sales, 100% sales tax reduction on purchases made, workforce training assistance and financial assistance from the New Jersey Economic Development Authority (New Jersey Economic

Development Authority) (NJ Dept. of Community Affairs). NJEDA's primary focus is on small businesses; perfect for the businesses created by entrepreneurs participating in a food incubator. NJEDA provides one-on-one counseling to help entrepreneurs find capital financing options and prepare loan packages, as well as providing loans, loan guarantees, and bond financing directly to small businesses (New Jersey Economic Development Authority; City of New Brunswick).

Business Planning

An integral part of creating a food business incubator is to decide what business planning assistance to provide for aspiring entrepreneurs. Many successful food business incubators require potential entrepreneurs to develop a business plan before they use the incubator. Food business incubators help aspiring entrepreneurs develop business plans by providing business plan worksheets, food business development courses, and start-up consulting services. Developing a business plan allows entrepreneurs to see what is necessary to create a business and can help them to decide if a food business is right for them.

El Pajaro Community Development Corporation in Watsonville, California operates a community kitchen that offers two types of business planning training for entrepreneurs. The first is a 3-hour evening seminar in which entrepreneurs learn the basic outline and components of a business plan and they create preliminary business plan outlines. The second is a "Business Plan in 4 Steps" course that meets for two and a half hours/week for four weeks. Participants create a detailed business plan that focuses on the feasibility of their business concept, marketing strategies, business organization and management, and financial management (to meet the requirements of investors and lenders). The Mixing Bowl in Albuquerque, New Mexico integrates business plan creation into the first steps of their Mixing Bowl Entrepreneur Development Program which guides participants through business plan review, assessment, and refinement.

New Brunswick

The New Jersey Small Business Development Center (NJSBDC) at Rutgers University in Piscataway provides courses on business development. The Business Plan writing course teaches participants how to develop detailed business plans during a 20-hour workshop for \$125. Participants consider strategy and organization, marketing and research, forecasting and financial projections, and financial statements and budget projections. Participants receive training and instructional materials. After completing the course, aspiring entrepreneurs can receive post-training business plan consultation to edit their business plan; for those who wish to plan, a basic business plan outline is available for free download on the NJSBDC website (Rutgers, 2016, 2017).

While the Center is in Piscataway, participants can travel from New Brunswick to the NJSBDC for free on the Rutgers Bus system. The Center also offers the business planning course in downtown New Brunswick through a partnership with Middlesex County Community College. The course is currently offered in English without translation. Given that a significant portion of the population speaks Spanish, the business planning course might not be accessible to some entrepreneurs.

Branding and Marketing Assistance

Understanding how to market products is an important part of creating a successful food business. Because many new food entrepreneurs need assistance to market their products, food business incubators often provide resources to teach them how to make the best use of marketing tactics to appeal to the widest audience. Through classes and or individual consulting, aspiring entrepreneurs learn about market analysis, target markets, competitive advantage, product demand, social media outreach, design, and community advertising.

There are multiple examples of how branding and marketing can be integrated as a resource within a food incubator. The Community Kitchen in Little Rock, Arkansas has an onsite business center where entrepreneurs can learn how to best market their product. Graphic artists at the center help entrepreneurs design logos, websites, and labels. La Cocina in San Francisco, California provides lists of websites, blogs and other resources to learn about branding and marketing online.

New Brunswick

Middlesex County Chamber of Commerce offers a network of business opportunity, programming and visibility for fees ranging from \$295 per year for home based cooks up to \$10,000 a year for a business with 3,000 or more employees (Middlesex County Regional Chamber of Commerce). The Google Community Leaders Program of New Brunswick has a small business team that works with small businesses in New Brunswick to help them develop and implement a marketing plan. It also teaches business owners how to best use technology to promote their business (Google Community Leaders Program-New Brunswick).

Food Business Services

Creating a small food business includes specific challenges and many food business entrepreneurs need culinary assistance as well as basic business training. We discuss food business services in the next section.

Ingredient Sourcing

For some entrepreneurs, getting high quality low-cost raw ingredients is a priority. Ingredient sourcing can help kitchen participants find suppliers that have healthy products. Ingredient sourcing can support local agriculture, increase revenue, and support accurate food labeling. Incubators may link community gardens, farms and stores to food entrepreneurs so they can find ingredients for their product. This supports local economy and sustainability. For example, if there are extra tomatoes in a local garden and an entrepreneur is making red rice (a Mexican dish of rice soaked in tomatoes), the incubator can connect the two entities. While there are health regulations to keep in mind, for some incubators, ingredient sourcing may look like connecting a kitchen tenant with a local grocery store, community garden, a local farmer, or even community supported agriculture (CSA).

Quad Cities Food Hub in Iowa connects regional farmers to consumers. This type of connection increases environmental sustainability and community relationships (Quad Cities Food Hub).

New Brunswick

The New Brunswick Community Garden Coalition links people to gardens for ingredient sourcing on a small scale. With support, facilitation, and an outlined plan, this could be expanded.

Cooking Classes/Lessons

Many incubators offer cooking classes to expand participant knowledge and ability, generate revenue, and improve public health. Kitchens used for classes may feature glass walls for outside viewing, filming equipment, demonstration areas, multiple cooking stations, and or distance learning. Some incubators offer classes to the public to subsidize operational costs. Classes offered can range from general cooking classes for adults to children's healthy habits and nutrition classes, and technical trainings.

Hope & Main in Warren, Rhode Island and Grand Rapids Downtown Market in Grand Rapids, Michigan both offer a broad range of fee-for-service classes that cost upwards of \$50 each (Hope & Main; Grand Rapids Downtown Market). The nonprofit organization Create Common Good in Boise, Idaho offers a "Foundations" program which teaches skills for general kitchen and custodial jobs. A three-step food training program follows. The first step teaches participants basic culinary skills and participants receive a ServSafe food handler's certificate. The second step increases hands-on learning and participants receive a ServSafe manager's certificate. The program's third step concludes with 225 hours of paid work to enhance employability. These trainings are offered at modest prices to encourage the participation of low-income and under-employed populations (Create Common Good).

New Brunswick

Elijah's Promise's Promise Culinary School provides state-approved vocational culinary arts training. These courses include cooking basics and more advanced skills. The school serves low-income residents by linking them to financial assistance. Promise Culinary also offers a community-based "Let's Cook" Program to improve nutrition and health for low-income families in New Brunswick. Residents learn hands-on cooking skills to make family-friendly healthy meals to enhance their diet. The program is free and emphasizes cooking with SNAP and WIC benefits and provides all ingredients (Elijah's Promise). Elijah's Promise could expand training for people with higher incomes to generate income to fund a community food incubator. The 2016 U.S. Kitchen Incubators: An Industry Update report found that nationally, approximately 10% of total revenue for food business incubators came from classes or trainings (Wodka, 2016).

Food Safety Certifications

Food safety training and certification is necessary for people who work in the food industry. The certifications required for different food industry tasks and positions depends on state, county and local requirements. ServSafe certifications, the National Restaurant Association Educational Foundation's certification program, is recognized, trusted and the most common. Some kitchens provide ServSafe classes at their sites; others refer people to outside training. While ServSafe is a commonly accepted certification, some municipalities require additional training and certification. Food business incubators have shown interest in ServSafe Certification for their participants in recent years, with ServSafe Certification jumping from a requirement for participants in only 43% of incubators in 2013 to 65% in

2015 (Wodka, 2016). This indicates that ServSafe could be an important service to provide for entrepreneurs in New Brunswick as they build skills and a reputation for their food business.

Of the thirty-eight incubators we researched, we found twenty-one provided some form of ServSafe certification training to their participants. Figure 2 shows the breakdown of the certifications offered. We found that many of the incubators that did not offer certification services required entrepreneurs to have ServSafe certifications to apply to use their facilities. We also found the Manager's certification a much more common legal requirement across states, with the Food Handlers certification being voluntary, as is the case in New Jersey, thus making the Manager's certification a much more popular offering from incubators.



Figure 2. ServSafe Certifications Offered

Source: Voorhees Fellow's Analysis of 21 Incubators

ServSafe certification requirements differ by state, county and locality. In Middlesex county, Food Handler certification (ServSafe or otherwise) is voluntary; it is required in nearby Somerset county. This Food Handler's certificate is the first level of ServSafe certification and includes education on basic food safety, time and temperature control, and cleaning and sanitation. The next level, the Food Safety Manager ServSafe certification, is a state requirement for food businesses in NJ. The certification must be held by at least one individual per food establishment in NJ and covers "personal hygiene, foodborne illness, receiving, storing, preparing and serving foods; food safety regulations and more" (ServSafe). Both certification-associated courses and exams are offered in English and Spanish and are available in-person throughout NJ including at Middlesex County College and online from ServSafe.

Table 1. Certification Acquisition in Middlesex County

Place	Cost	Notes
New Jersey Food Handlers	\$10	Free training in public schools, discounted training for volunteers, economic support upon request
Middlesex County Health Department	\$25	Limited Spanish availability Previously a weekday course
Elijah's Promise (EJP)	\$150	Training exam all in one day. Cost includes lunch and refreshments
Middlesex County College/ Online	\$15 \$125	Training and testing done in one day. Flexible scheduling for recertification. Vouchers, study materials,textbooks, coursebooks, an exam sheets all must be
Food Safety/Sanitation Consultants	Must Call for Fees	purchased in addition to the cost of the exam. Training and examination same day. Recertification online with proctor.
	New Jersey Food Handlers Middlesex County Health Department Elijah's Promise (EJP) Middlesex County College/ Online	New Jersey Food Handlers \$10 Middlesex County Health Department \$25 Elijah's Promise (EJP) \$150 Middlesex County College/ Online \$15 Food Safety/Sanitation Must Call

Source: Voorhees Fellow's Analysis of 38 Incubators

Food Development and Testing

Some food business incubators offer food related services including recipe development, menu design, tasting or testing rooms, and recipe standardization to assist with product development. And while most incubators market their kitchen as a "test kitchen" for businesses to develop new recipes, others expand on this basic service by offering professional guidance and or technical assistance with product development, including nutritional analysis and pH testing.

Recipe development is offered by many incubators including low-income focused WHEDCo in the Bronx, NY, and El Pajaro Community Development Corporation in Watsonville, CA (WHEDCo; El Pajaro Community Development Corporation). The Starting Block in Hart, MI offers technical assistance including pH testing and recipe batching, where entrepreneurs learn to prepare ingredients for large scale production (The Starting Block). The Rutgers Food Innovation Center in Bridgeton, NJ offers advanced food development services for large-scale production including microbiological testing, proximate analysis of protein, fat, fiber, moisture, & ash, sensory testing including shelf life testing, commercial sample manufacturing, and assistance scaling up for pilot production (Rutgers Food Innovation Center).

New Brunswick

The Food Innovation Center - North, a research center under the same direction as the RFIC in Bridgeton, is located in Piscataway, NJ and is accessible by car from New Brunswick. RFIC-North conducts consumer research for its food business guests and assists in scaling up production in a USDA and FDA approved facility (Rutgers Food Innovation Center-North). Their Product Development Laboratory allows small businesses to produce product samples as they adjust their recipes and is available for rent on a daily or weekly basis. Their Quality Control Laboratory includes ingredient, packaging, and product testing equipment for product development and is also available for daily and

weekly rental. Their Pilot Plant contains a range of equipment including a homogenizer, which can be vital in product standardization at larger scales. RFIC-North has technicians to instruct and assist entrepreneurs and can be most useful as food business entrepreneurs mature (Rutgers Food Innovation Center-North).

Elijah's Promise is another possible resource for recipe development services since they have infrastructure that could be used to establish a recipe development service. Their office and teaching spaces at the Livingston Avenue location could be used for focus groups and taste testing. While Elijah's Promise does not have the ability to conduct laboratory testing or nutritional analysis, it would be a good starting point for local entrepreneurs to begin recipe standardization and development as they establish their food business.

Creating Connections

The Incubator can benefit greatly from forming and maintaining intentional connections with individuals and the community. The connections the incubator makes have an influence on the services that can be provided.

Partnerships

According to the U.S. Kitchen Incubator: An Industry Update report, "40% of Incubators are Involved in at Least One Partnership" (Wodka, 2016: 6). The incubator's partnerships and connections will affect the participant entrepreneur. Connections to universities, county workforce training programs, food distributors, pantries and stores could provide more availability for space, funding for the incubator and an extension for the incubator's participants to be connected more directly within their community.

Many incubators are nonprofit organizations. Other incubators may have a private or public partnership. The Delaware State University Food Business Incubation Center "is managed by the Delaware Center for Enterprise Development in collaboration with the Department of Hospitality and Tourism Management." The staff "partners with the Delaware Health and Social Services Office of Food Protection" (Delaware State University). Additionally, the incubator's partnerships with local organizations like the Small Business Development Center and State of Delaware Office of Supplier Diversity allows participants to access technical support (Delaware State University).

Memorandums of Understanding

Memorandums of Understanding are a set of rules or agreements that can outline the use of a kitchen. In a kitchen network incubator set-up, MOUs are extremely important for outlining the responsibilities of the incubator and of the kitchens and kitchen owners. MOUs for a networked kitchen incubator are extremely important because they outline differences in use of many kitchens MOUs can also exist between the kitchens and the participants. An MOU can outline liability requirements, cost for rental, cleaning responsibility, scheduling information, cancelling a reservation, licensing information, insurance, and access to facilities.

Flint Food Works offers their operating procedures manual and example on their website. Their example manual includes items like hand washing, cooling and reheating products, cleaning equipment, restrooms, health policy, and purchasing food (Flint Food Works). Kitchen Commons, a community kitchen network provides a sample MOU that

outlines services and responsibilities of the entrepreneur and the host kitchen that covers the insurance, licenses and certifications required, inspection of facilities and storage (Kitchen Commons).

New Brunswick

Elijah's Promise may be able to provide sample MOUs or agreements they require for use of their kitchen space.

User Interface

Where can the average person learn about the incubator? Where do entrepreneurs book their kitchen space? An interface, most likely a website that is also mobile-friendly, can support the incubator's publicity. Having an accessible resource outlining what businesses the incubator is incubating and where to get their product as well as upcoming cooking classes or markets for revenue generation supports the function and revenue generation for the incubator and participants. A user interface would allow for all the resources of a networked kitchen incubator to be displayed and accessed in one place. The user interface could also offer easy-to-use scheduling for incubator participants only. Accessibility to a user interface includes language accessibility for all resources and accurate updated information.

One paradigm for presenting the physical network (kitchens, financial resources, vending spaces and office spaces) is a Google My Map. My Map allows all these points to be plotted with description information attached to each location. This type of interface also allows participants to maximize their time by locating resources closest to them, viewing what public transit lines are available to resources.

Retail Connections

It may be appropriate for incubators to provide places for entrepreneurs to sell their product(s). Residents indicated the need for connections to low-barrier vending opportunities (New Brunswick Community Food Assessment). Entrepreneurs may want to sell their products in a variety of places including at markets, festivals, bodegas, supermarkets, and restaurants. Barriers can include consistency of vending site, linguistic differences, distance to the vending site, licensing and paperwork for legal sale at certain sites, cost of application to sell at sites, and social acceptance into a space (Bergman, October 2016).

Hope and Main and Downtown Market Grand Rapids operate food markets with multiple vendors in addition to their incubator business services and kitchen spaces. Spice Kitchen also connects participants to market spaces and leverages their own brand to support the success of their incubating businesses. Lastly, Flint Food Works' incubator is in connection with the Flint Farmers Market offering connection to year-round vending opportunities for their participants. Vendors may or may not be participants in the incubator program, but the market space is a vending option for participants.

New Brunswick

The New Brunswick Community Farmers Market is an existing space where local and small businesses are encouraged to sell their products.

Alumni Networks and Resources

Alumni networks provide a network of support to participants and/or graduates of food business incubation programs. In today's increasingly globalized economy, having connections to other businesses and individuals can significantly increase a business' success. Alumni can serve as mentors to guide graduates through the process of starting a career in small food business, giving advice about job openings, potential guests, unexpected challenges, and more. The Alumni Network can also be an entity where members market and support each other's businesses.

La Cocina in San Francisco, California has both an alumni and graduate network. Their alumni network includes individuals who were not able to complete their program, but performed at a high level during their participation, continue to contribute to the community, or found success in the food industry. Their graduate network is comprised of individuals who successfully completed their food incubator program, reaching all established benchmarks to expand their business beyond La Cocina's kitchen. Both groups help La Cocina's recent participants and graduates attain another level of business success.

New Brunswick

Elijah's Promise has over 800 graduates from its culinary school program and has created an alumni network that enables these graduates to share information pertinent to best business practices and job opportunities with each other.

Facilitating Components of an Incubator

There are multiple aspects of managing a sustainable incubator network. It will take dedicated effort to organize and facilitate the process of creating a comprehensive kitchen-based incubator or a networked incubator in New Brunswick. The incubator's initiation and continued facilitation will require designated staff. According to U.S. Kitchen Incubator: An Industry Update 74% of kitchen incubators have at least one full-time employee dedicated to maintaining the incubator's functions and 58% have at least one part-time employee.

Employee(s) would be responsible for maintaining the connections to all the network partners and coordinating their services. Employees would support and guide the movement of the entrepreneur through the incubation process. Responsibilities would also include maintaining the MOUs and knowing New Brunswick. Without a designated catalyst for the components of an incubator, the incubator may not function efficiently.

Conclusion

Our semester of research and conversations with key actors working on New Brunswick food security has been truly inspiring. We learned about some incredible food incubators and community kitchens in the US working to serve food entrepreneurs and focusing on key demographics including women, immigrants, refugees, and low-income communities. They provide a wide range of services to participants that allow these small, local businesses to succeed and grow. Then we found that within New Brunswick there are many organizations already providing these services, from university entities to nonprofits to public organizations. It is clear that the capacity, passion, and motivation to make a food incubator a reality already exist in New Brunswick and we look forward to watching the work of the New

Brunswick Community Food Alliance, Elijah's Promise, and the many other collaborating organizations develop over the years to come.

References

Abell, Hilary. (2014). Worker cooperatives: Pathways to scale. Takoma Park, Maryland: The Democracy Collaborative. Retrieved from http://democracycollaborative.org/sites/clone.community-wealth.org/files/downloads/WrkerCoos-PathwaysToScale.pdf

A Community Kitchen. (2016). Business Center. Retrieved from http://www.acommunitykitchen.com/business-center/

Bergman, Charles. (2016 October 25). Personal semi-structured interview.

Brennan, Margaret. (2016 October 3). Personal semi-structured interview.

La Cocina: Cultivating Food Entrepreneurs. (2016). Small Business Development. Retrieved from http://www.lacocinasf.org/

Create Common Good. (n.d.). Using food to change lives and build healthy communities. Retrieved from http://createcommongood.org/

Delaware State University. (2016). Food business incubator center. Retrieved from https://www.desu.edu/business/food-business-incubation-center

Democracy at Work Institute. (n.d.) Creating better jobs and a fairer economy with worker cooperatives. Retrieved from http://institute.coop/sites/default/files/resources/BetterJobs.pdf

Democracy Collaborative. (2016). Broad based ownership models as tools for job creation. Takoma Park, Maryland: *Democracy Collaborative*. Retrieved from http://democracycollaborative.org/sites/clone.community-wealth.org/files/downloads/InclusiveEconomy_TDC_Web.pdf

Democracy Collaborative. (2014). Policies for community wealth building: Leveraging state and local resources. Takoma Park, Maryland: *Democracy Collaborative*. Retrieved from http://democracycollaborative.org/sites/clone.community-wealth.org/files/downloads/PoliciesForommunityWealthBuilding-September2014-final.pdf

Detroit Kitchen Connect. (2015). Our Mission. Retrieved from https://detroitkitchenconnect.com/kitchen-users/our-mission/

La Dorita Kitchen Share. (2016). Kitchen Share. Retrieved from http://www.ladorita.net/la-dorita-cooks/kichenshare/

Elijah's Promise - Food Changes Lives. (n.d.). Retrieved from http://www.elijahspromise.org

First State Community Loan Fund. (n.d.). Retrieved from http://firststateloan.org/about-first-state-clf/history/

Flint Food Works. (n.d.). About Us. Retrieved from http://www.flintfoodworks.net/

Forage Kitchen. (n.d.). Kitchen: Facilities. Retrieved from http://www.foragekitchen.com/facilities/

Kitchen Commons (n.d.). About KC. Retrieved from https://kitchencommons.net/about/

Middlesex County. (2016). Food handlers' course 2016. Retrieved from http://www.middlesexcountynj.gov/Government/Departments/PSH/Pages/Food-Handlers'-Course.aspx

FSS Consultants. (n.d.). Retrieved from http://www.fssconsultants.org/Home_Page.html

Google My Maps. About (n.d.). Retrieved from https://www.google.com/maps/about/mymaps/

Google Community Leaders Program: New Brunswick. (n.d.). Retrieved from http://www.newbrunswick-clp.org/

Grand Rapids Downtown Market. (n.d.). Retrieved from http://downtownmarketgr.com/

Grow Benzie Kitchen. (n.d.) Incubator Policies and Procedures. Retrieved from http://growbenzie.org/pdfs/Incubator-Policies-and-Procedures.pdf

Hope & Main | Rhode Island's First Food Business Incubator. (n.d.). Retrieved from https://makefoodyourbusiness.org/

Hot Bread Kitchen. (n.d.). Retrieved from https://hotbreadkitchen.org/

The Intersect Fund. (n.d.). Retrieved from: http://intersectfund.org

Jacob, Allyson. (2015). Behind the success of DC's unstoppable food incubator, Union Kitchen. *Elevation DC*. Retrieved from http://www.elevationdcmedia.com/features/unionkitchen_022415.aspx

Livingston Food Resource Center. (n.d.) Community Kitchen. Retrieved from http://livingstonfrc.org/expand/

Middlesex County Regional Chamber of Commerce. (2016) Calendar of Events. Retrieved from https://www.mcrcc.org/index.php/calendar-main

Mixing Bowl: The Kitchen for Entrepreneurs. (2016). Retrieved from http://mixingbowlnm.org/

New Brunswick Community Food Assessment. (2016). Ralph W. Voorhees Center for Civic Engagement, Edward J. Bloustein School of Planning and Public Policy. Rutgers, The State University of New Jersey.

New Brunswick Community Food Alliance. (2014). Making the food system work for everyone in New Brunswick, NJ. Retrieved from http://www.nbfoodalliance.org/

New Jersey Food Handlers Training. (n.d.). Retrieved from http://www.njfoodhandlers.com/

New Jersey Small Business Development Fund (2017). Retrieved from http://www.njeda.com/financing_incentives/programs/small_business_fund

New York City Economic Development Corporation (NYCEDC). (n.d.). HBK Incubates. Retrieved from http://www.nycedc.com/program/hbk-incubates

Online College. (n.d.). College in Common: How to Maximize the Potential of Your Alumni Network. Retrieved from http://www.onlinecollege.org/2013/04/17/college-in-common-how-to-maximize-the-potential-of-yur-alumni-network/

El Pajaro Community Development Corporation. (2016). Training. Retrieved from http://www.elpajarocdc.org/

Piscataway Public Library. (n.d). Financial Literacy. Retrieved from https://www.piscatawaylibrary.org/finliteracy/

Portland Mercado. (2016). From a Dream to a Reality. Retrieved from http://www.portlandmercado.org/background-information/

Quad Cities Food Hub. (n.d.). About Us. Retrieved from http://www.qcfoodhub.com/about/

Rising Tide Capital. (n.d.) About: Our Mission. Retrieved from https://www.risingtidecapital.org/about/ Rutgers New Jersey Agricultural Experiment Station. (2016). Personal Finance. Retrieved from https://njaes.rutgers.edu/money/

Rutgers, the State University of New Jersey, Business School Newark and New Brunswick. (2016). New Jersey Small Business Development Center at Rutgers New Brunswick. Retrieved from http://www.business.rutgers.edu/njsbdcnb

Rutgers, the State University of New Jersey, Food Innovation Center. (2017). Retrieved from http://foodinnovation.rutgers.edu/

Rutgers, the State University of New Jersey, Food Innovation Center - North. (n.d.). Retrieved from http://foodgateway.rutgers.edu/fic-north.html

Rutgers, the State University of New Jersey, School of Environmental and Biological Sciences, Agricultural Experiment Station, Office of Communications. (2013). Get to know Rutgers NJAES: Spotlight on the Food Innovation Centers. *Newsroom*. Retrieved from https://sebsnjaesnews.rutgers.edu/2013/07/get-to-know-rutgers-njaes-spotlight-on-food-innovation-centers/

ServSafe Food Handler, Manager and Responsible Alcohol Training. (n.d.). Retrieved from https://www.servsafe.com/home.aspx

Spice Kitchen Incubator. (n.d.). Incubation Model. Retrieved from https://spicekitchenincubator.org/about/incubation-model/

State of New Jersey, Department of Community Affairs. (n.d.). New Jersey Urban Enterprise Zone Program [Brochure]. Retrieved from http://www.nj.gov/dca/affiliates/uez/publications/pdf/UEZBrochure.pdf

State of New Jersey, Department of Health and Senior Services. (2007). Sanitation in retail food establishments and food and beverage vending machines. Retrieved from

http://www.state.nj.us/health/eoh/documents/chapter24_effective_1207.pdf

State of New Jersey, Economic Development Authority. (n.d.). Small Business Services - New Jersey Small Business Development Centers. Retrieved from http://www.njeda.com/financing_incentives/small_midsize_business/small_business_services/new_jersey_small_business_development_centers

The City of New Brunswick. (n.d.). Economic Development | Planning and Development. Retrieved from http://thecityofnewbrunswick.org/planninganddevelopment/economic-development-1/

The Starting Block. (n.d.) The Starting Block Fee Schedule. Retrieved from http://www.startingblock.biz/pdf/The_Starting_Block_Fee_Schedule.pdf

Stellaria Building. (n.d.) Hummingbird's Incubator Kitchen. Retrieved from http://www.stellariabuilding.com/incubator-kitchen/

Union Kitchen | Food Incubator. (n.d.). Retrieved from http://unionkitchendc.com/

United States Census Bureau. (2014). American Community Survey 5-Year Estimates 2010-2014. Retrieved from http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=CF

UW-Extension. (n.d.) Find a Kitchen or Copacker. Retrieved from https://fyi.uwex.edu/foodbin/

Vinik, Danny. (2015). Low-wage workers deserve predictable work schedules. *New Republic*. Retrieved from https://newrepublic.com/article/121528/lack-scheduling-flexibility-low-income-wrkers-big-problem

WHEDco - Building a Greater Bronx. (n.d.). Retrieved from http://whedco.org/

Wodka, Adam. (2016). U.S. kitchen incubators: An industry update. Philadelphia: *American Communities Trust, Econsult Solutions & Urbane Development*. Retrieved from http://www.actimpact.org/wpcontent/uploads/2016/03/U.S.-Kitchen-Incubators-An-Industry-Update_Final.pdf

Appendix A. Incubators

A Community Kitchen, Little Rock, Arkansas

A Community Kitchen is a fully equipped and commercially licensed commercial kitchen in Little Rock, Arkansas. The kitchen supports entrepreneurs through its business center. Some of the resources include: connections with local packagers and producers, a graphic artist who helps entrepreneurs with logo designs, websites and labels, reference to legal counsel, and referral to insurance agents for food businesses (A Community Kitchen, Little Rock).

Create Common Good, Boise, ID

Create Common Good in Boise, ID describes itself as a nonprofit social enterprise with the goal of helping adults with barriers to employment become self-sufficient through food service training and job placement assistance programs. The individuals they serve include those exiting the prison system, survivors of domestic violence, immigrants, refugees, and those leaving substance use disorder programs. They match the talents of those involved in their training programs with the needs of the surrounding community to create genuine partnerships that benefit all parties involved. They have developed a model of sustainability based on their paid food production services and products that help subsidize their food service training programs and generate revenue to keep the nonprofit afloat. In addition to these services which are targeted at restaurants and food producers, they also hold Supperclub meals and Cooking Classes for the public throughout the year; with premium ticket prices these events serve as both fundraisers for the organization and showcase the skills participants learn through their programs. Overall, Create Common Good aims to create a model of empowerment that could be used to reach similar goals in any community around the world, and seek to make their programs and successes replicable for other organizations (Create Common Good).

Delaware State University Food Business Incubation Center

Delaware State University (DSU) Food Business Incubation Center (FBIC) is on the Delaware University Campus. The center provides a shared use commercial kitchen and client support through local partnerships. The DSU FBIC also offers flexible hours and discounted rates for use of their facility. Guests can produce food products and can be connected to ServSafe training, technical and business development through local business centers and funding sources. Guests apply to the FBIC and commit to agreements regarding the use of the kitchen (pdf of application and client agreements can be found on their website) (Delaware State University).

Detroit Kitchen Connect (DKC), Detroit, MI

Detroit Kitchen Connect (DKC) is a nonprofit collaboration between Detroit's Eastern Market and FoodLab Detroit that connects participants to a network of commercial kitchens. The organization's mission is to support the diverse food entrepreneurs in the city. A vibrant local agriculture and food scene emerged in the wake of disinvestment and DKC supports local entrepreneurs that face financial difficulties getting their food businesses off the ground. Foodlab Detroit provides business support to local food entrepreneurs and Eastern Market is an accessible vending opportunity for those who use a DKC kitchen. Between the three networked organizations, the entrepreneurs have access to almost every imaginable assistance for their businesses. Some unique offerings include a collaboration with Detroit urban farmers for local ingredient

sourcing (called "Detroit Grown and Made") and access to a network of commercial kitchens in the city and metro area (Detroit Kitchen Connect).

El Pajaro Community Development Corporation, Watsonville, CA

El Pájaro Community Development Corporation, in Watsonville, California, provides small business development services for low-income minority entrepreneurs that includes bilingual business training and consulting for aspiring entrepreneurs. The organization's Kitchen Incubator includes a low rental cost commercial kitchen. The Kitchen Incubator also helps participants attain licensing and business support (El Pajaro Community Development Corporation).

Elijah's Promise, New Brunswick, NJ

Elijah's Promise in New Jersey began as a soup kitchen founded by three local churches in 1989, expanded to include a culinary arts training program in 1997, a catering business in 1999, and a baking and pastry program in 2010. Their nonprofit is rooted in the idea that food can change lives and they believe in harnessing this power to break the cycle of poverty and alleviate hunger in their community. Other core values of Elijah's Promise include creating social good through businesses, providing dignity and honor to the individuals they serve, and promoting healthy and sustainable food. While they do not formally identify as a food business incubator, they provide job training and education programs like a traditional incubator and rent their teaching kitchen to local food businesses, such as coffee roasters, pickled foods, baked goods, catering businesses, and traditional Oaxacan food items. These include their Promise Culinary School and Promise Catering social enterprise, both focused on serving low-income and food insecure populations. The Promise Culinary School offers vocational programs in Culinary Arts and Baking & Pastry Arts which include skills training, externships in the local community, personal development/life skills, and job placement assistance. Students can receive credit for their Promise Culinary training through partnerships with both local (Middlesex Community College) and national (Johnson & Wales University) educational institutions. Promise Catering employs students and graduates of their culinary school program and provides meals to schools, daycares, and community-based organizations including Meals on Wheels in Greater New Brunswick which serves the local homebound elderly population. In addition to their educational and job training program they also serve the local community through their community soup kitchen, comprehensive social services, and community garden (Elijah's Promise).

Flint Food Works, Flint MI

Flint Food Works partnered with Ruth Mott Foundation and Innovation Incubator among other organizations, has a mission to support food entrepreneurs from creating and perfecting their food and business all the way to marketing and selling their food. They offer commercial kitchen space and business development. Participants must apply, be interviewed and if accepted go through an online orientation. Applicants must be a legally recognized business within their state, have ServSafe Food Manager's certification and liability insurance. Flint Food Works offers their operations manual example on their website along with resources for funding food businesses, a food labelling guide and a guide to start small business. Flint Food Works also operates market space that they connect their participants to the Flint Farmers Market hosting year-round vendors and vending opportunities (Flint Food Works).

ForageSF, San Francisco, CA

The ForageSF incubator kitchen is a fully equipped commercial kitchen in San Francisco that even provides dishwashing staff. ForageSF is a nonprofit that started out supporting wild food foragers and expanded into three projects: "The Underground Market" food market that is no longer running, the "Wild Kitchen" underground supper club and the Forage Kitchen. The kitchen serves both "chefs and chefs at heart" and has different membership levels. Professional chefs get the best hourly rates and the full suite of services and recreational cooks pay slightly more. Forage is unique in all the onsite services offered including the aforementioned dishwashing, composting and recycling of food waste, office space, and a cafe where entrepreneurs can sell their products. The incubator also offers classes and mentors to help with the business side (ForageSF).

Grand Rapids Downtown Market, Grand Rapids, MI

Grand Rapids Downtown Market, Inc. in Michigan is a mixed-use facility that includes a market hall with commercial and restaurant spaces, a rooftop greenhouse, classes and events, private rentals and leasing, and an incubator kitchen. The incubator builds upon the area's existing food movement by providing an inclusive space and community for entrepreneurs looking to start and grow food businesses. Their commercial kitchens and associated spaces are available 24/7 and provide equipment to assist entrepreneurs in food production, pastry production, packaging including labeling, prepping, and catering. They also advertise "practical business tools" and "technical assistance" for their entrepreneurs. Their developed food businesses are primarily artisanal products such as specialty cupcakes, cold brew coffee, craft brew brownies, naturally flavored shaved ice, artisanal sausage, organic kombucha, gourmet meat rubs and "vegan meats" (Grand Rapids Downtown Market).

Hope & Main, Warren, RI

Hope & Main is Rhode Island's first culinary business incubator. It helps the local food community by creating a community of support where entrepreneurs can develop and grow their businesses. Hope & Main, a nonprofit incubator, includes a market, community garden and event and workshop space. It focuses on growing businesses that are in their first two-to-three years of operation and assists entrepreneurs through a combination of "below market-rate" rentals of health-code-compliant commercial kitchen and storage spaces and extensive business service support programs (Hope & Main). These services include shipping, receiving, labeling and packaging facilities, cooperative purchasing, business model development, customer and distribution assistance and mentorship programs. All of this is included in a monthly fee that is based on kitchen use and storage space (which includes overhead costs associated with the space, such as trash collection, cleaning, and utilities). They have helped a variety of small food businesses to grow including personal chefs, food trucks, and artisanal bakers and provide continued support to dozens of food businesses (Hope & Main).

Hot Bread Kitchen, New York, NY

Hot Bread Kitchen (HBK) is a nonprofit social enterprise that includes a bakery, job-training program, and food business incubator based out of Manhattan, NY. In 2007, Hot Bread Kitchen began operating their Bakers in Training program for women facing economic insecurity out of their founder Jessamyn's home kitchen. By 2010, they had moved into La Marqueta, an indoor market in East Harlem, where they sold the bread that the women in their training programs had baked. It was here that they were selected by the New York City Council and Economic Development Corporation to run an incubator out of

the market. This lead to the creation of HBK Incubates in 2011, based on Hot Bread Kitchen's own start-up success. This incubator uses a four-pronged approach to help entrepreneurs succeed in building their small food businesses. HBK Incubates four major focuses are commercial kitchen access, business development support, culinary community, and market access. Based off these core components, HBK Incubates provides 24/7 access to a 3,000-sq. ft. fully equipped kitchen, workshops and educational resources, an on-staff business advisor, alumni events, entrepreneur exchanges, and access to catering opportunities and retailers, among other programming (Hot Bread Kitchen).

Kitchen Commons, Portland, OR

Kitchen Commons is a non-profit with a mindset for food justice that connects a network of community kitchens. Kitchen Commons partners with a local University as well as foundations like Charitable Partnership Fund and MRG Foundation for funding. Their model of a kitchen network includes a directory of partner kitchens and a kitchen resource guide. They offer a leadership training program that teaches people how to start and sustain community kitchens. Moreover, they provide connections to a resource network for idea exploration and collaboration (Kitchen Commons).

La Dorita, Sharpsburg, PA

La Dorita is a Pittsburgh company that produces Dulce de Leche and was started by Argentine immigrants. Inspired by their business startup process, the family started the Kitchen Share, a nonprofit commercial kitchen and incubator program. The program serves low-income entrepreneurs with a focus on women and immigrants. While it is competitive to get access to La Dorita's comprehensive business incubation process, which includes access to the kitchen as well as "up to \$70,000 worth of free incubation and coaching services," the website also provides some free basic resources such as a product pricing tool and a guide to starting a food business in Allegheny County (La Dorita).

La Cocina, San Francisco, CA

La Cocina is a nonprofit food business incubator located in San Francisco, California whose mission is to help low-income food entrepreneurs grow their businesses through access to affordable commercial kitchen space, business and technical assistance and connections to distribution opportunities. They aim to make their entrepreneurs financially secure and independent while simultaneously developing an innovative and inclusive food-centered economy. La Cocina helps women, immigrants and people of color, which aligns with the diverse and economically vulnerable population in the Mission District they are situated within. With food entrepreneurs located in kitchens throughout the community, La Cocina turns illegal and informal home food production into dependable legal businesses benefitting entrepreneurs as well as the community at large. The entrepreneurs selected from their application process begin their experience with a six-month preincubation period where they received technical assistance to establish their product, marketing, finance, and operations foundations. After successful completion of this program, they begin working in the kitchen and the true incubation of their product. Upon graduation businesses remain a part of the community through an alumni network. Their current and graduated participants largely focus on foods from the entrepreneurs' heritage bringing a "taste of home" to their local community. In addition to their primary work as an incubator La Cocina also operates an online store, selling gift boxes made up of products produced by their entrepreneurs and branded items, provides catering from their entrepreneurs, workshops open to the public, and an annual gala and conference (La Cocina).

Livingston Food Resource Center, Livingston, MT

The Livingston Food Resource Center is an anti-hunger nonprofit in Livingston, MT that includes a food pantry, community kitchen, and other community services. While it is not clear from the website whether the community kitchen is still up and running, the facility served the low-income community and offered affordable hourly rates scaled on the phase of the business (Livingston Food Resource Center).

Mixing Bowl, Albuquerque, NM

Mixing Bowl food incubator in Albuquerque, NM offers a full range of kitchen and business services. The Mixing Bowl came out of efforts to improve economic development in the region and serves food entrepreneurs. It offers special services for minority, women, and veteran entrepreneurs. Guests have access to training, mentoring, business plan writing, and product approval through a partnership with? the South Valley Economic Development Center. There are also opportunities for collaborations, and connections to distributors, packaging facilities, and vending (Mixing Bowl).

Quad Cities Food Hub, Davenport, IA

Quad Cities Food Hub a bi-state initiative between Illinois and Iowa that connects farmers and consumers to increase regional local food production and consumption. The organization seeks to achieve this goal through education and training. Additionally, the organization has a fully equipped and licensed shared commercial kitchen in Davenport, Iowa. The commercial kitchen can be rented for low hourly rates which help eliminate overhead cost for new food entrepreneurs. Guests who use the kitchen receive menu planning, business education, and product development assistance (Quad Cities Food Hub).

Rutgers Food Innovation Center, Bridgeton, NJ

The Rutgers Food Innovation Center (RFIC) in Bridgeton, NJ is a for-profit unit of Rutgers University and The NJ Agricultural Experiment Station focused on a combined mission of food business incubation and economic development acceleration. RFIC offers a robust range of services for both startup and established food and agriculture value-added businesses focused on four major areas, business and technical mentoring, training and specialized services, product manufacturing, and international trade services. These comprehensive services include marketing research, focus groups, federal, state and local food safety documentation, analytical and microbiological testing, product development including labeling, packaging, and product preparation and handling instructions, sensory evaluations, quality assurance, and technical and lab services. RFIC's 23,000 sq. ft. facility includes shared-use processing areas for refrigerated foods processing, beverages and hot processing, bakery and dry processing, and a cold assembly/clean room as well as including client services areas such as a conference room, library, office space, research kitchen and laboratories. Their mission is to "stimulate and support sustainable economic growth and prosperity to the food and agricultural industry by providing businesses with innovative research, customized practical solutions, resources for business incubation and a trusted source for information and guidance" (Rutgers Food Innovation Center).

Spice Kitchen Incubator, Salt Lake City, UT

Spice Kitchen Incubator in partner with Salt Lake County offers access to a commercial kitchen and technical and business training for entrepreneurs who are marginalized, including refugees. Spice Kitchen focuses on marketing and branding with direct connection from their kitchen to their market space. A component of the incubation program is the use of Spice Kitchen's brand to support participating food

businesses. Access to their commercial kitchen is subsidized and costs anywhere from \$15 to \$25 per hour. Spice Kitchen offers access to capital for participants by connecting them to microloans. They also host workshops for the public to generate income. Their program includes an application process and 3 steps (pre-incubation, incubation, and graduation) (Spice Kitchen).

Starting Block, Hart, MI

Starting Block is a nonprofit food-business incubator in Hart, Michigan with a mission to support entrepreneurs in the food and natural resource sector. Starting Block provides aspiring entrepreneurs with a shared use commercial kitchen that is licensed and approved by Michigan Department of Agriculture for rent at a low hourly wage. The facility includes equipment, storage space, and a USDA-inspected meat processing facility (The Starting Block).

Union Kitchen: No Ma, Washington D.C

Union Kitchen: No Ma, founded in 2012, is a Washington, DC based food business incubator co-founded by Jonas Singer and Cullen Gilchrist. The co-founders needed a kitchen to make their award winning Blind Dog Cafe chocolate chip cookies. After moving into a 7,500-square foot warehouse with one of the only viable commercial kitchens in the area, the co-founders realized they had too much space. Recognizing that other food businesses needed production space, they began to rent the kitchen and its amenities to expanding businesses. Union Kitchen provides business services to help members access capital and distribute their product nationally and internationally. The incubator recently opened its own retail outlet called Union Kitchen Grocery on Capitol Hill where members and local food businesses can sell their products (Union Kitchen).

University of Wisconsin-Extension Food Business Innovation Network, Madison WI

The University of Wisconsin Extension maintains an updated list of rentable kitchen facilities and packing facilities in the state. The website also provides resources for starting food businesses and food business incubators. Information for businesses covers licensing and regulations, food safety, and packing and labeling. Information for incubators includes risk management, client services, and incubator management. On Mondays, a Small-Scale Food Manufacturing Specialist is available by phone or video to answer questions. The Network partners with other programs within the state and incubators throughout the country including the Rutgers FIC (University of Wisconsin- Extension).

Women's Housing and Economic Development Corporation (WHEDCo), Bronx, NY

WHEDCo was established in 1996 in the Bronx, NY as a nonprofit community development corporation focused on developing healthy and vibrant communities for chronically impoverished families in the South Bronx. Beginning with the primary goal of building affordable and sustainable homes, their mission has expanded to include increasing accessibility to the broad spectrum of resources that build strong communities including early education and afterschool programs, cultural programming, fresh and healthy food, and economic opportunity. Their Bronx Cookspace food business incubator focuses on these last two goals by providing local aspiring entrepreneurs with four separate workspaces in their fully equipped commercial kitchen available for affordable rates 24/7. The Cookspace also offers one-on-one technical assistance to entrepreneurs, from helping register businesses and obtain licensing and insurance before even being accepted into the program to establishing short and long term goals for the business from the very beginning of their incubation to cost analysis, recipe development, labeling and packaging as businesses

develop their product. Serving over 35,000 residents annually through their programming, WHEDCo's economic development initiatives, including the Bronx Cookspace, Home-based Childcare programs, and Commercial Revitalization, help over 500 small business owners establish and operate their businesses each year (WHEDCo).

Appendix B. Worker Co-ops

Once the New Brunswick incubator is running with successful participant businesses, a next step would be to determine how the individuals participating will continue to develop their food business. This could mean exploring alternative versions of businesses that cater to low-income or immigrant communities' particular business-expanding needs.

The typical top-down business model of employer and employees may not work for communities with many low-income immigrants. Their lack of access to resources makes it so they must find and or create alternative methods to use resources they do have to their advantage. This has caused a rise in the number of alternative models of businesses, such as workers cooperatives.

There are a wide variety of other ways to support these individuals. Employee stock ownership plans (ESOPs) allow owners to sell their shares of the business to their employees with large tax savings and social enterprises employ and build career paths with a social mission, particularly for those with employment barriers (Democracy Collaborative, 2016, pg. 2). These are just some examples of other kinds of alternative business models for differing community needs that support business entrepreneurs.

However, there is a specific warrant for focusing on worker cooperatives in New Brunswick. Worker cooperatives (co-ops) are a non-traditional business approach that prioritize collective ownership over the traditional top-down model of employers and employees. Individuals in a cooperative have an equal stake over decisions and how they want their business to develop and they often pool resources. Cooperatives empower underprivileged communities who may face obstacles in the workplace. Workspace hardships can include wage theft, hazardous working conditions, lack of scheduling flexibility, language barriers, and lack of cultural sensitivity. These issues have persisted even after the Great Recession. Many worker co-ops actively resist these obstacles, which has made them increasingly popular. Public interest in cooperatives has surged since the global financial crisis (Abell, 2014:13) and in the U.S., there are 300 co-ops that employ more than 4,500 people (Democracy at Work, n.d.: 4).

We know that growing inequality is bad for families, social cohesion, and ultimately the economy. Lack of economic and social mobility undermines the promise of our democratic institutions. Cooperatives help keep money in the local economy (Democracy at Work, n.d.: 6). Co-ops attempt to remediate the gap in wealth by giving its participants an option to collectively build wealth. The money that is collected stays in the community by having locals buy from a collective made up of their neighbors. This is a reason to support co-ops. "More than half of worker cooperatives in the United States today were designed to improve low-wage jobs and build wealth in communities most directly affected by inequality, helping vulnerable workers build skills and earning potential, household income and assets" (Democracy at Work, n.d.:2). Today's job market is made up of a considerable number of low-wage jobs, so having this alternate model to find employment can help these individuals have a higher wage and, by extension, better quality of life.

To have a workers' co-op up and running, it must have substantial financial support to help with its inception. Most worker cooperative development in low-income communities to date has been primarily led by private nonprofit organizations, which can provide key long-term capacity over the development process (Policies for wealth building, 2014: 6). Nonprofits across the nation have been able to provide much of what co-ops need to succeed, from financial support to many of the other services we discussed as being important in starting an incubator.

This would certainly be an interesting business model for New Brunswick to consider adopting should the incubator project become successful over the next few years. We are excited to see its growth, whichever path it may take.

Chapter 12. New Brunswick Food System Action Plan

Created by the New Brunswick Community Food Alliance work groups, the Feeding New Brunswick Network, and the New Brunswick Community Garden Coalition

Edited by Cara Cuite and Erin Royals

Working Together for a Food Secure New Brunswick is a collaborative project of the New Brunswick Community Food Alliance, Johnson & Johnson, and Rutgers University. Project partners conducted a three-phase food assessment and planning process to support efforts to improve community food security in New Brunswick. In Phase I, partners conducted a community food assessment to better understand the food security landscape in New Brunswick. New Brunswick Community Food Alliance work groups incorporated the food assessment findings into their work and drafted strategic priorities during Phase II. In Phase III, the partners transformed the priorities into a food plan which they presented to the New Brunswick Community Food Alliance and other interested parties at a Community Food Security Roundtable and at the Winter 2017 Food Forum.

The food assessment and planning process builds on the work of community organizations, residents, universities, medical institutions, corporations, government, and statewide organizations that have sought to reduce hunger, poverty and to improve food security in New Brunswick. The food assessment and planning process was organized with the New Brunswick Community Food Alliance which launched in 2012 to improve community food security with a vision that "All City residents have access to adequate amounts of nutritious, safe, affordable, and culturally appropriate food at all times and in socially acceptable ways and enjoy the health and economic benefits of a strong local food system" (New Brunswick Community Food Alliance Bylaws, 2012). The Alliance fulfills its mission "to serve as the City of New Brunswick's Food Policy Council, bringing together community partners and stakeholders to integrate aspects of the local food system (production, processing, distribution, access, consumption, recycling and waste management) in order to enhance the environmental, economic, social and nutritional well-being and health of the New Brunswick community" (New Brunswick Community Food Alliance Bylaws, 2012) through five work groups plus the Feeding New Brunswick Network (FNBN), a coalition of food pantries and community kitchens, and the New Brunswick Community Garden Coalition (NBCGC).

Food Assessment and Planning Process

Phase I. Food Assessment

The three-phase food assessment and planning effort began with a food assessment. Partners sought to describe the food environment and to understand who lacks food security and why. To conduct the food assessment, the partners conducted a literature review and gathered, analyzed and mapped Census and American Community Survey data to describe New Brunswick's population, housing, and economic characteristics. The partners also conducted 35 interviews with food pantry directors and staff, two regional food bank directors, food pantry recipients, 59 community organizations, institutional staff, and 70 community residents to better understand who lacks food security and why. Additionally, the partners identified and mapped food stores and conducted a survey of the commercial landscape in Unity Square and Georges Road neighborhoods to better understand the neighborhood food-shopping context. Research teams and community partners presented the projects to a variety of audiences. The process concluded with a

synthesized food assessment presentation to the New Brunswick Community Food Assessment Advisory Committee in June 2016 and to the New Brunswick Community Food Alliance in July 2016.

Phase II. Food Planning

The partners began the food planning phase during the summer of 2016. Research team members presented food assessment highlights to New Brunswick Community Food Alliance's five work groups and supported their efforts to develop draft strategic priorities. The New Brunswick Community Food Alliance work groups plus FNBN and CGC presented the draft priorities at the October 2016 Food Security Roundtable. With more than 60 attendees, including community residents, community organization leaders and staff from Rutgers, Middlesex County College, and Rutgers Robert Wood Johnson Medical School, the work groups reviewed their priorities and began to develop implementation plans. They focused on identifying their priorities for the next three years, the resources and partners they will need to successfully address their priorities, and any barriers and how to remove them.

Phase III. Food Plan Finalization

The New Brunswick Community Food Alliance work groups continued to develop their strategic priorities following the Roundtable and produced this food plan. It incorporates the relevant food assessment findings, work group priorities, and initial thoughts on implementation.

Food Plan Priorities

This food plan documents the New Brunswick Community Food Alliance's priorities for the next three years. Each section is organized with an introduction of food assessment findings, which is followed by strategic planning priorities, and next steps. It includes sections for the four New Brunswick Community Food Alliance work groups plus the Feeding New Brunswick Network. The Appendix includes a timeline that outlines the timing of implementation for each work group's priorities. Because of an overlap in mission and members, the Agriculture work group and the New Brunswick Community Garden Coalition worked together to produce priority items for this plan.

Agriculture and Community Garden Coalition

New Brunswick is home to a growing community and school garden infrastructure that includes 12 community and 9 school gardens with more than 200 garden beds. The CGC, a coalition of gardening organizations created in 2012, supports the community gardening community. It hosts events such as a seed swap to engage residents, builds connections among community gardeners, teaches gardening skills and soil testing, provides seeds, and supports community gardener needs and interests (D'Auria, 2012).

In addition to growing plants, New Brunswick's gardens are used for a variety of activities. They are educational spaces for children and adults. Workshops and classes teach gardening skills, introduce new foods and how to cook them, and enable gardeners to learn from one another. For example,

- FoodCorps members run afterschool programs in some gardens.
- A preschool class grows food at Promise Garden and Apple Orchard.
- Third grade students learn about topics such as lead safety at monthly 4-H meetings in the New Brunswick Public Library's Pizza & Taco' Garden.

- · Girl Scouts garden in the New Brunswick Community Farmers Market Children's Garden.
- At the Greater Brunswick Charter School, preschool and kindergarten children donate some of the food they grow to the school's food pantry.
 - Elijah's Promise provides compost education in the Promise Garden and Apple Orchard.

The gardens have also become a location for projects to increase exercise and education. Elijah's Promise with Rutgers Robert Wood Johnson Medical School and the Rutgers Landscape Architecture Department started a "Guardians of the Garden" program in 2015, which connected guests of Elijah's Promise Soup Kitchen with the Promise Garden and Apple Orchard. This program paid a stipend for 16 weeks of garden work during the growing season. The food assessment found that some residents, especially residents who use the food pantries, are interested in growing food in community gardens but some are not aware of the gardens, some did not know how to reserve a garden bed, and others found that their nearest community gardens are full.

Priority 1: Create Workshop and Events Series

The Agricultural work group will create educational workshops to improve residents' gardening skills and to enhance the community infrastructure for gardening. To do this, the work group will talk with residents about how the Community Gardening Coalition (CGC) can engage them in gardening. During year one, the work group will create an events calendar and make gardening information available in English and Spanish. After surveying the community to identify topics of interest, it will organize two resident-led workshops and educational opportunities on topics such as organic pest control, composting and safe soil and growing. The CGC will also host three events: a Seed Swap and pre-season clean-up, a mid-season event such as a walking/biking tour, and a post-season harvest event. The group is exploring whether they can participate in Rutgers Day, an annual event held on the fourth Saturday in April.

In year two, the work group will continue to survey community residents to identify more community-led education topics and workshops. The group will offer 4-6 events to residents in partnership with different community gardens. It will also organize 2-4 arts and cultural events at community gardens and expand workshops to include preserving food and intermediate gardening. In year three, the group will regularize the community event calendar and create a consistent outreach effort and plan. Building on what the group learns during years one and two, it will craft a rotation of community-led, beginner, intermediate, and preserving workshop activities and create resources to support the workshops.

Priority 2: Create Garden Outreach Strategy

The second priority is intended to make the gardens more visible to attract more residents. The work group will create a garden outreach strategy that will include branding, signage, map updates, and communication. In year one, the work group will work with the Community Engagement work group to create a marketing plan to share information with community residents in effective and culturally relevant ways. This may include distributing information through schools and producing a health and wellness newsletter. The work group will create a portfolio of bilingual resources, build a network, expand the mailing list, increase its social media presence, and add signs at community gardens. In year two, the work group will continue to add garden signage, regularize communication, program cross-community garden events, build network involvement, and expand the membership list. In year three, the work group will continue with activities started in previous two years.

Priority 3: Engage Youth in Gardening

The third priority is to increase youth engagement. The objective is to improve awareness among New Brunswick youth of community gardens and to get them involved in garden activities. During year one, the work group will build capacity to engage youth by applying for grants, adding garden signage, and creating materials for school gardens. They will also work on strategies to engage younger residents in gardening through outreach and programming. The work group will work with FoodCorps to program events and to engage the schools in the CGC. A new AmeriCorps service member will expand programming for children and youth. This will help to build a network to support, donations and in-kind services for school gardens. Partnerships with community leaders can increase outreach to students about gardening. Because the Greater Brunswick Charter School (GBCS) runs an active gardening program, the work group will start with them. GBCS offers a variety of programs that attract students and their families such as HarvestFest and Family Learning Nights. The Garden Coalition could host a Family Learning night organized around gardening and or food security. The work group can also work with GBCS to expand youth volunteering and to test digital platforms such as Google Classroom. During year two, the work group will implement programs after capacity is built at living labs and greenhouses at Rutgers and at the Charter School. It will build on the partnerships established in year one and support their school partners to expand community gardens as needed. The work group will focus on maturing the school agriculture program in year three, growing gardenrelated micro-enterprises such as selling micro-greens and flowers, and connecting food services to academic curriculum. They will also formalize resources available to school gardens.

Community Engagement

Two issues highlighted as needs in the food assessment fall into the Community Engagement work group's subject area. The first, engaging more residents, community leaders and others in the work of the New Brunswick Community Food Alliance, was identified by many current members of the New Brunswick Community Food Alliance as well as through interviews with residents. The second was supporting the many organizations that are in engaged in nutrition and cooking education. This issue was raised through interviews with those educators.

Priority 1: Develop and Implement New Brunswick Community Food Alliance Marketing Plan

Many New Brunswick residents do not know about the New Brunswick Community Food Alliance and what it does, and its work group's objective is to develop a deliberate New Brunswick Community Food Alliance marketing and meeting announcement plan and to implement it. The objective of the marketing plan is to educate the public about the New Brunswick Community Food Alliance, recruit residents to participate in New Brunswick Community Food Alliance activities and work groups and advertise New Brunswick Community Food Alliance and work group meetings. The Community Engagement work group will tap into marketing experts who already do this type of work in New Brunswick, solicit ideas from the other work groups, train people to educate residents about the New Brunswick Community Food Alliance, and translate promotional materials into Spanish. At a New Brunswick Community Food Alliance Voting Members meeting, attendees will be divided into project-based groups to work on topics such as youth-based outreach and marketing. To support meeting announcements, the Community Engagement work group will create a New Brunswick Community Food Alliance promotion toolkit and to-do list, which will introduce a standardized to-do checklist, which lays out steps to advertise events.

Priority 2: Network Food Nutrition Education Providers

Many interviewees identified a need to expand food, nutrition, and cooking education. Currently a variety of groups work on these issues and offer slightly different programming for different population subgroups. Food, nutrition and cooking educators include: Elijah's Promise, SNAP-Ed (the nutrition education arm of the Supplemental Nutrition Assistance Program), the New Brunswick Community Food Alliance, 4H, FoodCorps, and Robert Wood Johnson University Hospital. The organizations could increase their impact if they coordinate resources. Many of these organizations already work together but they could benefit from regular meetings and a central repository of educational curriculum, materials, information about food-related assistance for residents of New Brunswick, and recipes. The Community Engagement work group intends to convene these nutrition educators to share resources and expertise. Also, many residents welcome the opportunity to share their cooking skills and recipes with others and these organizations could engage these residents in educational programming. The work group will help them to collaborate and co-host nutrition education workshops. Nutrition educators will be encouraged to become members of the New Brunswick Community Food Alliance.

Feeding New Brunswick Network

New Brunswick is home to more than 20 food pantries and two soup kitchens that provide groceries and or meals for New Brunswick residents and many people who live outside of the city. Even though the city has a robust emergency food system, the food assessment identified some areas for improvement. First, many pantries lack signage and a presence on the Internet. Second, because of work and public transit service, some guests would appreciate extended Saturday and evening hours. Third, some residents would like to choose the food they receive because they do not know how to cook some ingredients and some people have dietary restrictions. Fourth, many pantry directors and guests would like more fresh produce (Voorhees Fellows, 2015).

Priority 1: Create a Centralized Client Registration System

FNBN's first priority is to create a centralized client registration system that will allow the food pantries to more efficiently and equitably distribute food to those in need. Guests would register every year in a central location. They would receive a pantry identification card to use at each participating pantry. The card would structure how many visits they could make to each pantry per month. This system should reduce paperwork for individual pantries, fill gaps, and improve client services. One next step is to advocate for the creation of a city identification card from New Brunswick city administration. A second step is to work with the Community Food Bank of New Jersey (Community FoodBank of New Jersey) to accept other forms of identification and ensure that the centralized registration system aligns with Community FoodBank of New Jersey's new reporting system. The Emanuel Lutheran, Christ Church, St. Alban's, and Deliverance Prayer Revival Tabernacle food pantries are committed as initial partners.

Priority 2: Identify and Apply for Grants and Resources

FNBN prioritized working together to identify and apply for grants and other resources. They believe that they have a greater opportunity to receive funding if they apply as a collective rather than as individual agencies. FNBN will need assistance to write grant proposals. Most of the small pantries rely on

volunteers and donations and do not have the ability, computers, or know-how to apply for grants on their own. They have already received help from the Advancing Community Development class offered through the Collaborative. Two students are committed to writing grant proposals for them in the Spring 2017 semester.

Priority 3: Explore the Creation of Choice and/or Centralized Food Pantry

Feeding New Brunswick Network's third priority is to create choice pantries that enable patrons to select their food rather than to receive a bag of pre-selected foods. Increasingly, people work within the emergency food sector believe that client choice pantries can eliminate some food waste as some guests discard food they are not familiar with. The long-term objective involves a large-scale client choice pantry that will also be a one-stop site for social services and other resources. Next steps to realize this priority include securing funding for a planning grant, locating a site and project funding, and coordinating pantry participation and support.

Food Economic Development

As part of the food assessment, researchers spoke with many residents who are interested in starting or expanding their food businesses. While some resources are currently available to help them, these resources are not currently networked together and many not know they exist. The process of starting a new or growing an existing food business can be very hard to navigate for entrepreneurs. Small food entrepreneurs are interested in accessing health and food safety training for food producers, inexpensive commercial kitchen space, and business training and support especially about product marketing.

Priority 1. Create a Food Business Incubator

The Food Economic Development (FED) work group's first priority is to create a community food business incubator. Their potential partners include: Elijah's Promise; the Intersect Fund; the Food Innovation Center and Unity Square. They expect that they will need funding, staff and to identify a location. Expected costs include training, building renovations and operating costs. Their next steps include identifying commercial kitchens that are interested in partnering, convening a focus group with food makers to identify the resources and services they need to start new and grow existing food businesses, to develop partnerships to provide those services and to review New Jersey health and food production policy and rules. The Fall 2016 Ralph W. Voorhees Fellows Public Service Fellows began the research process and identified what incubators do and what resources already exist in and near New Brunswick (Voorhees Fellows, 2016; see Chapter 11)).

Priority 2: Further Develop a Marketing Plan for New Brunswick Restaurants

FED's second priority is to develop a marketing plan for New Brunswick restaurants. New Brunswick Tomorrow and Esperanza's current program Corazon de New Brunswick is focused on the French Street corridor and launched January 2016. FED plans to explore the possibility of expanding on this existing map. Creating a plan would require staff time, expertise, and funding. Potential partners include the city government, New Brunswick Tomorrow, Rutgers University, local food retailers and Middlesex County Community College. Costs will include staff time and the production and distribution of promotional

materials. Next steps include identifying target populations, developing marketing training, and identifying which area(s) will be included in the marketing plan.

Priority 3: Identify Strategies to Strengthen Local Food Businesses

FED's third priority is to meet with potential partners to strengthen local food businesses. Potential partners include Rutgers University, Johnson & Johnson, RWJUH, and local food retailers and distributors. They will need staff time and expertise and funding. Their next steps include conducting research to identify similar efforts and to learn from their experience, holding a community forum with bodega owners and restaurants, and creating a planning and implementation timeline.

Healthy Food Access

The importance of access to culturally appropriate fresh produce was a common theme in the food assessment, and multiple work groups are addressing this in different ways (e.g., FNBN is trying to increase the amount of fresh produce available in the pantries). The food assessment found that residents would like more access to healthy low cost produce, fish and meat in corner stores and the New Brunswick Community Farmers Markets, and more fresh produce at food pantries. In addition, members of the New Brunswick Community Food Alliance were interested in following up on some earlier work to increase healthy meals in the public schools. Finally, earlier partnerships between the New Brunswick Community Farmers Market and houses of worship around the city were found to be an effective way to increase consumption of fresh fruits and vegetables from the market, so this was identified by residents as a program that they would like to see continued.

Priority 1: Expand Hub City Fresh Healthy Corner Store Initiative

Development of New Brunswick's Hub City Fresh Healthy Corner Store Initiative (Hub City Fresh) became a priority for the New Brunswick Community Food Alliance in 2012 because of earlier community forum discussions. An initial assessment of the corner store food environment was completed in 2013 with funding from the U.S. Department of Agriculture, which also supported the formation of the New Brunswick Community Food Alliance. Additional grants from Rutgers University-Community Research Partnership and The Food Trust funded a citywide assessment of the food stores, interviews with 35 store owners/managers, and launching of the store-based improvements. Hub City Fresh currently includes nine corner stores, and uses a community research-based approach to collaborate with store owners to carry and promote healthier foods, while incentivizing guests to buy them.

In 2017, the program will maintain its forward progress through promotion of healthier foods in the corner stores and will expand its focus on guests to include school children and families. Earlier efforts of the Hub City Fresh program focused on working with the store owners to stock and promote healthier food items through inventory, structural changes, and promotional signs. For example, corner store owners were encouraged to promote healthier food items by conspicuously placing them next to the cash register. Future efforts will involve additional promotional strategies such as food taste testing, and nutrition education messages geared toward children and families. The idea is to reach children and families in corner stores and other places such as schools to encourage healthier eating habits and food choices. Next steps include writing a grant proposal to fund further work, and providing in-store and in-school nutrition education about healthier options in corner stores, by working with organizations that are already in schools, such as FoodCorps, SNAP-Ed, 4H, and Chartwells.

Priority 2: Connect New Brunswick Community Farmers Market and Faith-Based Communities

Given the number of residents who are congregants of New Brunswick houses of worship, the New Brunswick Community Farmers Market (New Brunswick Community Farmers Market) has identified the faith-based community as an important partner in its mission of providing fresh fruit and vegetables to low-income residents of New Brunswick. In prior years, the New Brunswick Community Farmers Market was connected to a small number of houses of worship through a healthy living project run through the Cancer Institute of New Jersey. As part of this program, the New Brunswick Community Farmers Market provided vouchers for fresh produce to congregants who participated in health-related activities. Once the Cancer Institute ended the program, many of the congregants expressed interest in staying connected with the New Brunswick Community Farmers Market and continuing to receive the vouchers.

The Healthy Food Access (HFA) work group will work on re-connecting the New Brunswick Community Farmers Market with the faith-based community. It envisions an expanded partnership that includes inviting faith choirs and praise dancers to perform at the Jones Avenue market on selected Saturdays and inviting congregants to host mini-farmers' markets after services on alternating Sundays. In addition, the New Brunswick Community Farmers Market staff or other nutrition educators, such as those from SNAP-Ed, will be available to provide nutrition education.

Market representatives have met representatives of one congregation who also serve on the Interdenominational Alliance of New Brunswick and Vicinity to discuss how to move forward. They identified a potential location for a pop-up market which is near multiple houses of worship. At least one congregation is interested in having their choir and praise dancers perform at the market in the 2017 market year. The first of these special market days is planned for September 9, 2017. The New Brunswick Community Farmers Market partners have identified some potential funding mechanisms and are looking for more. They outlined a grant proposal, and are working together to submit a proposal. The HFA work group could use assistance from the Advocacy and Policy work group to better understand how the city's rules would affect the development of a mobile farmers' market or produce truck, which is one model that would allow fresh produce to be available for sale at the congregations.

Priority 3: Evaluate Breakfast After the Bell in New Brunswick Public Schools

The office of the Mayor of New Brunswick and the Healthy Food Access work group supported the implementation of the School District's Breakfast After the Bell (BATB) program, which, since 2014, has provided free breakfast for all K-8 students in their classrooms at the start of the school day. Before that, free breakfast was available to all students in the cafeteria before the start of the school day. The HFA work group advocated strongly for BATB, as they believed it would ensure that more students eat breakfast, which in turn can mean that more kids are coming to school on time and are ready to learn once they have had breakfast. After its success in advocating for the initiative, the New Brunswick Community Food Alliance was interested in evaluating the program to determine if it has been implemented as planned, and if it is fulfilling the original objectives. For example, the project will address how many children are eating breakfast now compared to before the program was implemented, and whether there has been a change in attendance because of the program.

To evaluate the program, researchers from the HFA and Rutgers University have partnered with the New Brunswick Board of Education and the New Brunswick School District. The partnership was awarded a 2016-17 Community-University grant from Rutgers to conduct the evaluation research. The research project

will investigate how well the program is meeting its goals and identify any potential areas for improvement. Specifically, the researchers are evaluating how breakfast participation, attendance, tardiness, and disciplinary actions have changed post-BATB. In addition, the researchers are conducting interviews with administrators and school staff including food service workers, nurses, guidance counselors, and custodial staff to gather their perspectives on the successes and challenges of the program.

Parents will participate in an online survey that will ask about breakfast consumption at home. Teachers will participate in an online survey that will focus on challenges they face getting children to eat breakfast in the classroom. Finally, a small group of students will participate in focus groups, which will focus on impressions of the food choices and reasons students choose to eat school breakfast.

Much progress has already been made. As of December 2016, researchers have interviewed over 20 staff and met with the District-wide administrative team, including the Superintendent and most principals. Online parent surveys are scheduled for January 18th, focus groups with students are being scheduled for January and February, and the teacher survey will be conducted in the Spring of 2017. In the Spring and Fall of 2017, the research team and the HFA members who originally advocated for the program will present the findings of the evaluation with school staff, parents and community residents.

Advocacy and Policy

An important role of the Advocacy and Policy (A&P) work group is to provide guidance for the other work groups about policy barriers they may face. Thus, many of the other work groups have requested support from this A&P to help them better understand how to move their own action plans forward.

Priority 1: Advocate for Municipal Support for Mobile Food Vending

The first priority of the A&P work group is to advocate for municipal support for mobile food businesses. This work group conducted research outlining New Brunswick's existing mobile food truck ordinance and produced a policy brief that specifies the challenges facing mobile food vendors in New Brunswick. It plans to outline several recommendations, including changes to the municipal code and the creation of a pilot program. This action item will build on this research and help to create pathways to formalize informal businesses by researching required steps to formalize a food business, advocating for policy issues that reduce barriers to entry for entrepreneurs operating informally, and researching and understanding local ordinances and pilot programs in cities with vibrant small-scale mobile food businesses. Potential partners include the Food Economic Development work group, the City of New Brunswick, Elijah's Promise, Unity Square, and New Brunswick City Market.

The next step for this action item is planning a policy potluck. The event will explore the opportunities and barriers facing mobile food businesses through a panel discussion. Invited panelists will include a food truck owner, a local restaurant owner, and a City official, as well as a representative from Asbury Park who can speak to the success Asbury Park has had with mobile food business. This event seeks to create a space for dialogue around the policy barriers to mobile food businesses in New Brunswick. This event will be open to the public and a coordinated outreach effort will be made to make sure community members are informed.

Priority 2: Food System Research

The second priority is to research food system issues, identified by soliciting questions and requests from other work groups, and researching legislation at the local, state and federal level that affects the food

system. Prior work group research requests and other work group activities prompted this action item. In the past, the A&P work group fielded food-related policy research requests from other New Brunswick Community Food Alliance work groups and this action item seeks to continue that tradition. Tracking food-related policy and legislation will help establish New Brunswick Community Food Alliance-wide policy priorities and will help better inform the public. By working with the Community Engagement work group, changes in food-related policy and legislation can be effectively communicated to residents. The next step is to identify a Rutgers student interested in policy research.

Priority 3: Hold Listening Sessions with Individuals Facing Food Insecurity

The third priority is to hold listening sessions with individuals facing food insecurity. The work group is exploring how best to implement this effort, such as by creating a resident advisory board that draws from a diverse group of residents who experience food insecurity. These listening sessions will build on the assessment and will continue to engage the community to learn about the challenges they face. This research will inform which issues the work group focuses on. The work group also sees the potential for this priority to build the capacity for residents to advocate for these issues themselves. Potential partners include the Community Engagement work group, SNAP-Ed, houses of worship, and Feeding New Brunswick Network. The next step is to recruit members of the advisory board and to create a structure for the listening sessions.

Next Steps

The work groups presented this food system action plan at the February 13, 2017 meeting of the New Brunswick Community Food Alliance, and subsequently presented highlights to the public at the New Brunswick Community Food Alliance Food Forum on February 25, 2017. Work on the action plan will continue throughout 2020. According to the timeline presented in the appendix, each work group will report back on its progress to the New Brunswick Community Food Alliance at its bi-monthly membership meetings.

References

D'Auria, Alena. (2012). Cultivating Community: The Growth and Goals of the New Brunswick Community Gardening Coalition. Spring 2012 Independent Study. RWV Center for Civic Engagement. Edward J. Bloustein School of Planning and Public Policy. Rutgers.

New Brunswick Community Food Alliance. (2012) Retrieved from http://www.nbfoodalliance.org/resources/nbcfa-bylaws.pdf

Voorhees Fellows. (2015). A Study of Food Pantries in New Brunswick, NJ. New Brunswick: Ralph W. Voorhees Center for Civic Engagement, Edward J. Bloustein School of Planning and Public Policy, Rutgers University.

Voorhees Fellows. (2016). Community Food Incubation and the Potential to Create Small Food Businesses in New Brunswick. New Brunswick: Ralph W. Voorhees Center for Civic Engagement, Edward J. Bloustein School of Planning and Public Policy, Rutgers University.

Appendix A. Food Plan Implementation Timeline

	2017-2018	2018-2019	2019-2020
Agriculture and Community Gardening Coalition			
Priority 1: Create Workshop and Events Series	x	х	х
Priority 2: Create Garden Outreach Strategy	x		
Priority 3: Engage Youth in Gardening	x	х	х
Community Engagement			
Priority 1: Develop and Implement NBCFA Marketing Plan	Х	х	
Priority 2: Network Food Nutrition Education Providers		х	х
Feeding New Brunswick Network			
Priority 1: Create a Centralized Client Registration System	x		
Priority 2: Identify and Apply for Grants and Resources	x	х	x
Priority 3: Explore the Creation of Choice and or Centralized Food Pantry	х	x	
Food Economic Development			
Priority 1: Create a Food Business Incubator	х	х	Х
Priority 2: Develop a Marketing Plan for New Brunswick Restaurants			Х
Priority 3: Identify Strategies to Strengthen Local Food Businesses	Х	X	
Healthy Food Access			
Priority 1: Expand HUB City Fresh Healthy Corner Store Initaitive	x	х	х
Priority 2: Connect New Brunswick Community Farmers Market and Faith-Based Communities	X	х	
Priority 3: Evaluate Breakfast After the Bell in New Brunswick Public Schools	х	x	
Advocacy and Policy			
Priority 1: Advocate for Municipal Support for Mobile Food Vending	х		
Priority 2: Track Food-Related Legislation	x	х	х
Priority 3: Hold Listening Sessions with Individuals Facing Food Insecurity		х	х