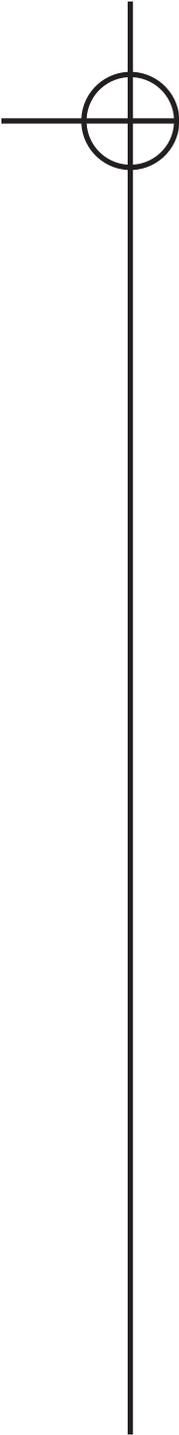


BUFFALO FRESH AT THE GREEN COMMONS

Food Hub Development at 925/927 Washington Street





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Prepared for Buffalo Niagara Medical Campus
University at Buffalo
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EXECUTIVE SUMMARY

"Food hubs are broadly defined as facilities that manage the aggregation, storage, processing, distribution or marketing of locally and regionally produced food. They fulfill from one to all of these functions and come in a variety of shapes and sizes. No matter their form, they are promising models for bringing family farm food to more Americans."¹

Buffalo Fresh at the Green Commons, referred to as Buffalo Fresh, is home to Buffalo's very own "farm to table" destination filled with comprehensive designs to accommodate education, wellness and accessibility. Buffalo Fresh is an area where the people of Buffalo can come to learn about locally grown fresh foods as well as what it takes to maintain a healthy lifestyle. Education classes in our conventional kitchen will provide an insight to healthy living for the Buffalo community. The space also provides education to children which is crucial this day in age due to a severe obesity epidemic occurring in the United States.

The Buffalo Fresh at the Green Commons Plan is a space that promotes localized food, healthy eating, and wellness education. Beyond the promotional goals, it is a comfortable place to have a meal and relax with friends. The Buffalo Fresh Plan includes a comprehensive branding and marketing presence with a strong social media following and promotional efforts for upcoming events.

The physical limit of Buffalo Fresh within the Green Commons is the property at 925/927 Washington Street and the lot at the corner of Carlton & Washington, City of Buffalo parcel #923. Buffalo Fresh includes a café area with indoor and outdoor seating, a commercial kitchen, a conventional educational kitchen, and office space with conference rooms. The guiding design principle throughout the indoor space is an open floor plan that is simple and adaptable. The exterior space includes community gardens, gathering spaces with seating, a gazebo, and a greenhouse.

One of the major goals of Buffalo Fresh is to bring locally grown fresh foods to an area that suffers from a severe lack of quality food access. The Buffalo Fresh at the Green Commons borders the historic neighborhood known as the Fruit Belt. This is an area of generally low-income households and sparse automobile ownership. Many area residents have a sense of food insecurity; in some cases, families are left wondering how they will get their next meal. Healthy and organic foods are often more expensive in grocery stores and for many of these families are just simply not a choice. Buffalo Fresh at the Green Commons provides fresh and healthy foods from local farmers to families in need. It serves as a functional dialogical space for the community and BNMC employees and patrons.

General education and awareness are the guiding principles of Buffalo Fresh at the Green Commons. Raising awareness, doing community outreach and providing education offer residents of the Fruit Belt and surrounding neighborhoods of the Buffalo Niagara Medical Campus a way to remain active through available programming. A key mission of Buffalo Fresh at the Green Commons is to educate the City of Buffalo about the importance of supporting local farmers. On top of providing, promoting and teaching the importance of a healthy lifestyle, it is a space that promotes sustainability. The ultimate goal is a space that closes the gap between the Buffalo Niagara Medical Campus and its surrounding neighborhoods by bringing the community together through education, social interactions and wellness.



SECTION 1

Introduction

A. Overview

The Buffalo Niagara Medical Campus Green Commons, at the corner of Carlton Street and Washington Street, is a blank canvas of boundless possibility (Figure 1.1). The ultimate goal for this plaza within the medical campus is a dialogic space where people can learn, interact, relax, and play. Area residents, campus employees, and out-of-town visitors alike can use and enjoy this space to the fullest. The Buffalo Niagara Medical Campus Green Commons is a comprehensive and interactive space that promotes sustainable energy solutions, ecological thoughtfulness, convenient transportation options, and healthy food solutions.

B. Our Mission

The Buffalo Niagara Medical Campus (BNMC) and Buffalo's historic Fruit Belt neighborhood (Figure 1.2) are two separate entities that come together in a co-existing, ever growing medical community. The BNMC was created as a way to connect nine different medical and research based organizations into one functioning area. The campus establishes a connection between the medical community and the surrounding neighborhoods by bringing economic promise and premium medical services, along with green space, pedestrian safe sidewalks, and complete streets. In lieu of creating a "glass wall" between itself and surrounding neighborhoods, the BNMC strives to embrace its neighbors in addition to providing top-rate medical services.

Buffalo Fresh at the Green Commons, referred to as Buffalo Fresh, is designed to act as a connection for these two separate entities. Furthermore, the purpose of Buffalo Fresh is to create a space where healthy fresh foods will be an economical and sustainable option. The issue with the surrounding neighborhoods is the lack of access to healthy foods. Buffalo Fresh will house a learning center with lessons, workshops, and group activities that all promote local fresh foods and healthy living. The ultimate goal is to educate the surrounding neighborhoods about maintaining a healthy lifestyle. Beyond the promotional goals, it is a comfortable place to have a meal and relax with friends. Buffalo Fresh includes a comprehensive branding and marketing presence with a strong social media presence and promotion for upcoming events. The mission and visions of the BNMC are to bring Western New York the brightest and best by attracting them through opportunities that give the region access to education, biomedical research, entrepreneurship and clinical practice. To coincide with the goals of the BNMC, Buffalo Fresh will be a beneficial addition to the community in promoting better lifestyles and healthy living.

Figure 1.1: Buffalo Fresh - Green Commons



Figure 1.2: Historic Fruit Belt





SECTION 2

Background Information

*Blending a low-resource neighborhood
with a well-established medical campus.*

A. Social Structure

A great accomplishment of Buffalo Niagara Medical Campus (BNMC) has been creating an environmentally friendly campus and community. Green infrastructure improvements have been completed on the medical campus at the three acre surface parking lot at 589 Ellicott Street. The campus is home to one of the largest bioswales in the region located at the south end of the campus along Goodell Street. There are 21 electric vehicle-charging stations across the campus as well as integrated bicycle infrastructure. BNMC is a local trailblazer in creating sustainable workplaces. For help in creating these sustainable workplaces, BNMC worked closely with Goodwill Industries "Good Works" program to create a BNMC Green Team. This team provides year-round employment opportunities for a growing number of qualified people. The not-for-profit Global Energy Institute located at the campus and the University at Buffalo Power Center for Utility Explorations collaborated to explore "power and energy issues to develop innovative solutions to the complex challenges found in energy infrastructures such as electric, gas and related transportation, water and renewable power systems."²

Employees of the Buffalo Niagara Medical Campus

Currently, BNMC employs over 12,000 people. Included within this number of employees are five hundred professionals obtaining master degrees, two hundred professionals obtaining postdoctoral degrees, and 1,400 registered nurses. The major sites where employees work in the downtown region are Kaleida Health, Roswell Park Cancer Institute, and University at Buffalo School of Medicine. The majority of these employees are physicians, scientists, nurses and hospital staff. In addition to the employees, there are internship programs available for high school and college students. Buffalo Fresh at the Green Commons serves to benefit from the employees of BNMC and vice versa. Figure 2.1 breaks down the number of employees within three major sites located at BNMC.

The University at Buffalo's School of Medicine provides a small population in itself, composed of students who attend classes at this location. Although the data represents a fraction of the population who makes up the BNMC, the employees and students between these three

Figure 2.1

Employer	Kaleida Health	Roswell Park Cancer Institute	UB School of Medicine
# of Workers	5,579	3,272	2,771
# of Students	N/A	N/A	169

facilities are beneficial to Buffalo Fresh. Some other individuals within the population of the BNMC community may include families of the patients and visitors of the community, all of whom provide a need for a place such as Buffalo Fresh. This can be the impetus for Buffalo Fresh to receive feedback from a population that would benefit from its services. Any type of feedback will be heard and considered. This would help work out any issues that Buffalo Fresh might face before officially launching. Another way Buffalo Fresh can benefit from employee input is encouraging involvement throughout the planning process. Having input from employees will provide them with the opportunity of having a say in a project that affects them. If given the chance, the employees would be enthusiastic about Buffalo Fresh since their input is being taken into consideration. There will also be a focus on the students attending UB School of Medicine. The students will help determine the different educational opportunities to provide at Buffalo Fresh. Both students and employees can be used to spread awareness about Buffalo Fresh. If it is successful with the employees and students located in BNMC downtown area, it could reach out to other entities that make up BNMC:

- Olmsted Center for Sight
- UNYTS
- Buffalo Hearing & Speech Center
- Buffalo Medical Group

Once Buffalo Fresh is up and running, there should be efforts to service employees working outside of the downtown region in Buffalo. For now, the targeted audience of Buffalo Fresh is set to remain at a local level.

Patients and Visitors

BNMC serves over one million patients and visitors annually. Due to confidential reasons there is no precise representation of the various patients served at BNMC. One could assume with the large number of patients that come to BNMC, some of them could be a resident of another state or country. The demographics of the patients should be used to the advantage of Buffalo Fresh. With these demographics, there is a better understanding of who Buffalo Fresh could serve outside of the residents and employees within downtown Buffalo. This makes access to Buffalo Fresh inclusive for all patients that would like to use the services provided. The demographics help determine which patients would be unable to access Buffalo Fresh because of physical impairments.

Therefore, it is important to develop a process for bringing healthy foods from Buffalo Fresh to those patients who are physically unable to come to the location. Families and friends who visit BNMC to see their loved ones should be taken into consideration as well. For most people it is difficult to gain access to healthy food especially without access to a car. Some families may fly to this location because driving would either be impossible or maybe too long of a trip. Buffalo Fresh could fix this issue for family and friends of patients who prefer to have healthier options during their stay. Since Buffalo Fresh would be within walking distance from the facilities of BNMC, it provides easy access for those without a car. It also serves as a place for people to relax in a comfortable setting, which may for some moment relieve any grief they may be feeling.

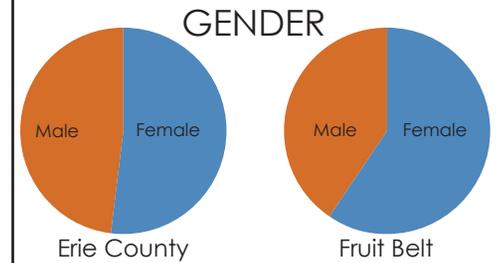
There are numerous possibilities for Buffalo Fresh to become successful. The population of BNMC should be utilized to its fullest to gather input and suggestions for Buffalo Fresh. It is important to include the employees of BNMC early in the planning process for Buffalo Fresh. They can provide different insights for what is working and what is not. Overall, this is a very important population for Buffalo Fresh to serve and to get them to feel they have the option to healthy foods as well as education about these healthy foods, all provided within a comfortable setting.

Census Data

To have a real understanding of the Fruit Belt neighborhood, one must compare the area to its surrounding county. The following information is based on the 2010 U.S. Census Bureau data for both Census Tract 33.02 and Erie County.

The majority of people that are patients of BNMC or employees of BNMC are over the age of 18. The population over 18 in Census Tract 33.02 is 79%. This number is very similar to that of Erie County where about 77% of the population is over the age of 18. Furthermore, the breakdown of male versus female is very similar in this neighborhood versus Erie County. There is a small percent more females than males in the Fruit Belt (Figure 2.2), where in Erie County male and female percentages are the same. The total population in Census Tract 33.02 is 3,292 people and is comprised of 97.8% of the total population being of one race population. Only 2.2% of the population is two or more races.

Figure 2.2: Census Data



When comparing Erie County to Census Tract 33.02, or the Fruit Belt, the racial breakdown was completely different. The two races that seem to be complete opposites in each area are the White race and the Black/African American race. The majority of Erie County is 78% White (735,244 people), meanwhile the Fruit Belt is only 7% White (232 people). When comparing Black/African American racial backgrounds, the Fruit Belt is made up of 87% and Erie County's Black/African American racial group is 13% (Figure 2.3).

When comparing the Asian population and American Indian or Alaska Native in both Erie County and the Fruit Belt they were both essentially identical. Both areas had 3% of their total population of Asian background. When comparing the American Indian or Alaska Native population in both areas, both of their populations have very small percentages of people with American Indian or Alaska Native background.

In Erie County the majority of people work in fields of business and science, 37% (Figure 2.4). Meanwhile people in the Fruit Belt that have occupations within the fields of business and science is 24% or 190 people, but there are more people working in jobs related to service occupations, about 28% or 218 people, or have jobs in fields that are related to sales and office work, about 30% or 232 people. One of the main reasons why the Fruit Belt can be lacking people who work in jobs that are related towards business and science is the lack of college education within the neighborhood itself. Many of the fields of work that people attain within the Fruit Belt are fields of work that don't require a high level of education or even some college education at all.

When analyzing the data for people who have jobs in fields related towards transportation, as seen in the charts the percentage of people who have transit jobs is slightly greater, 16%, than Erie County, which is only 11% percent of its population. This can be due to the fact that the transportation systems throughout Erie County are less structured than the downtown Buffalo area due to that fact that it is a city whereas parts of Erie County are more suburbanized and even rural in some areas.

The number of people in the Fruit Belt who are employed within the labor force is 36%, meanwhile the population of people who are not employed within the labor force in Erie County is 36% (Figure 2.5). Also the number of people who don't work within the labor force in the Fruit Belt is 63% or 1,698 people, and is nearly identical to the number of people who do work in the labor force within Erie County, which is 64%. Seven percent of the Fruit Belt population is unemployed and no one is currently enrolled in the armed forces.

Figure 2.3: Census Data

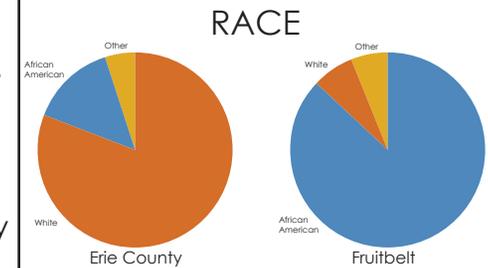


Figure 2.4: Census Data

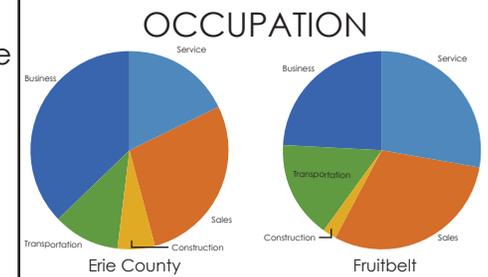
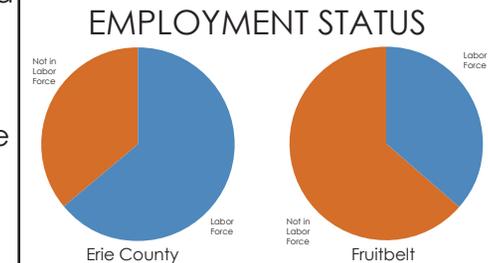


Figure 2.5: Census Data



The rate of public transportation use is shown (Figure 2.6) within the Fruit Belt, 71% of the population uses public transportation for their daily commute to work compared to 5% of the population within Erie County. In Erie County, 81% of the population drives alone to work. Some of this could be due to the fact that people who have jobs within the downtown area of the City of Buffalo do not drive their cars to work because of how limited and/or expensive parking downtown can be.

Within the Fruit Belt, 14% of the population walks to work on a daily basis instead of driving or using public transportation, only 3% of the population within Erie County walks to work. Much of this is due to the fact that people who live in Erie County work in different neighborhoods instead of working within the neighborhoods they live in.

Furthermore, an additional statistic that stood out when analyzing data from the Fruit Belt and Erie County was the percentage of individuals working from home. Within the Fruit Belt, around 12% of the population work out of their homes compared to 2% of the population within Erie County that work from home. This may be due to that fact that people within the Fruit Belt neighborhood do not have the funds to afford an automobile and therefore, finding a job where one can work from home becomes more suitable.

Educational attainment was another important statistic to analyze in both the Fruit Belt and Erie County. Census Tract 33.02 has a very low population percentage with a higher education degree, including associates, bachelors and graduate. This is extremely different than that of Erie County as a whole, where 41% of the population has a higher education degree.

The previous information on the Fruit Belt directly corresponds with the income levels of this area. The median household income in this area is approximately \$22,536 compared to Erie County where the median household income is \$46,816. Also, most of the population in the Fruit Belt is in the lower income levels. Eighty-four percent of the people in this Census Tract make less than \$50,000 annually. This is extremely different than that of Erie County; 40% of the population makes below \$50,000 annually. Considering the education level in this area is very low and the income is also significantly low, Buffalo Fresh becomes a place of significance in the fact that it will provide an affordable and accessible option for healthy lifestyles as well as a place for people to learn about what it takes to remain healthy outside of Buffalo Fresh. The children of the Fruit Belt neighborhood and communities alike will have a chance to grow up knowing what it takes to live through a lifestyle based on "active verbs in an active space". Buffalo Fresh provides the Fruit Belt with a healthy and active lifestyle.

Figure 2.6: Census Data

COMMUTE TO WORK

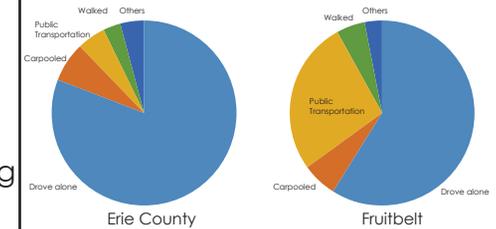
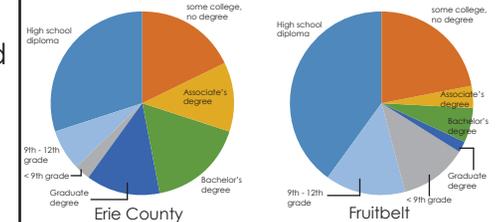


Figure 2.7: Census Data

EDUCATIONAL ATTAINMENT



B. Infrastructure

The historic Fruit Belt was a place where its early inhabitants were German immigrants who settled into the community and remained a tight-knit neighborhood until the 1950's. When the Kensington parkway was built it separated the neighborhood and since then has become a low income area (Figure 2.8). As for the medical aspect of this region, for decades all major clinical care, research facilities and education establishments have been separated but still co-existing throughout the downtown area. The establishments, "...collaborated with regard to patient care and scientific research for years..." although still, "...there had been little coordinated planning for the development of our shared property".³ The medical community and the Fruit Belt were both suffering and in need of fixing. The solution was to create the BNMC and to unite the neighborhoods and campus into a flourishing community that could function as one.

In 2001 the medical community began a new journey. A master plan was created and BNMC was a major part of the plan. Institutions within the City of Buffalo, Erie County and the historic Fruit Belt formed this master plan. A twenty year plan was created and within eight years the plan was accomplished. This master plan was then updated in 2010. "Since its inception, the BNMC has become a hub of public and private investment. It has emerged as the address for the region's life sciences initiatives".² The missions and visions of this medical campus are to bring Western New York the brightest and best by attracting them through opportunities that give the region access to education, biomedical research, entrepreneurship and clinical practice.

To create this medical hub in the region, the major organizations in research, clinical practices and education needed to come together to work as one organization. Nine major partner organizations collaborated to create one medical campus. These organizations collaborated together to create the BNMC board of directors. The purpose is to come together to create initiatives, innovations, incentives and donations that would allow this medical community to flourish. There are seven organizations that make up the board members and two other organizations who are involved as well to create the "Nine Partner Organizations". The seven board member organizations include:

- Buffalo Hearing and Speech Center
- Buffalo Medical Group
- Hauptman-Woodward Medical Research Institute
- Kaleida Health
- Olmstead Center for Sight

Figure 2.8: Fruit Belt Neighborhood Sign





- Roswell Park Cancer Institute
- University at Buffalo

The other two partners are:

- Center for Hospice and Palliative Care
- Ross Eye Institute

The success and accomplishments of the BNMC were made possible by the nine partner organizations.

Community involvement and revitalization of Buffalo is important for the BNMC. To stay true to their principles the campus has been successful in leveraging public-private partnerships for job creation. Instead of working on only creating a strong work environment within the medical campus, they have created an urban revitalization process by working “inside-out”. This process allows the BNMC to “fully engage and equip diverse local communities and leaders to create their own future”.⁴ The economy that the campus is bringing in is to be a local economy based on mutuality between the campus and its surrounding communities. Now that the medical campus has established a name for themselves, they are onto the next stage of growth, which involves growth with the community, new construction projects and more collaboration with institutions. The continued growth of the BNMC will provide more jobs and economic opportunities. “It is also a great time to leverage workforce initiatives with an emphasis on local hiring.”⁵

A part of the medical campus is the “four neighborhoods, one community” initiative which is aimed at the continuation of conserving the shared communities of the Allentown Neighborhood and the Historic Fruit Belt. Since the BNMC was established the board has regularly met with neighborhood leaders. In 2008 the “four neighborhoods, one community” initiative was created in partnership with the City of Buffalo, the Fruit Belt neighborhood, Allentown and the medical campus. The objective of this partnership is to “capture previous planning efforts and empower community members to speak with one voice about the changes they would like to see in their neighborhoods”.⁶ The master plan for the BNMC has also been designed to further integrate connectivity to downtown Buffalo as well.

Additional ways that the BNMC has worked to benefit the community is through a program called *Neighborhood Explorer*. A focal project of the *Neighborhood Explorer* program is reinvestment in and a redesign of Ellicott Park. In addition to Ellicott Park, many of the institutions within the BNMC are decorated with beautiful works of art. The art was donated by grateful patients, supportive

benefactors for patients, employees and the public. In August 2013 two 50'x20' murals painted by local artists were installed in a parking garage on the corner of Michigan and Goodrich Streets (Figure 2.9 and 2.10). Also, the Buffalo Renaissance Foundation approached the BNMC as a site for the first installation of its Downtown Sculptural Arts Initiative on the Southeast corner of High and Ellicott Streets on the campus.

This is a newly launched program designed to connect the medical campus's 12,000 employees with local small businesses surrounding the medical campus in the Allentown, Fruit Belt and Downtown neighborhoods. To support the local businesses, employees receive a wallet-sized *Neighborhood Explorer* card which allows them to receive discounts at restaurants, retail merchandise, drinks, fitness centers, maintenance services and much more. The businesses place window signs on their buildings to indicate that they are a participant in the *Neighborhood Explorer* program to make it easier and more enticing for employees of the medical campus to enjoy their business.

With the construction of new buildings and parking garages for the BNMC, the area is becoming heavily urbanized. To relieve the heavy urban feel of the new campus, the exterior campus was given a face lift. Ellicott Park is also one of the largest campus exterior projects.

The \$6 million federal streetscape project is "designed to increase active living opportunities and encourage purposeful "collisions" as employees move around. This 3,300 linear park, designed by nArchitects, will extend all the way from Goodell to Best Streets and include forking paths, islands, and plazas. It will also have banded concrete, illuminated benches, a diverse planting scheme, and signature lighting, running through the heart of the Buffalo Niagara Medical Campus".⁷

Figure 2.9: Mural painted by local artists

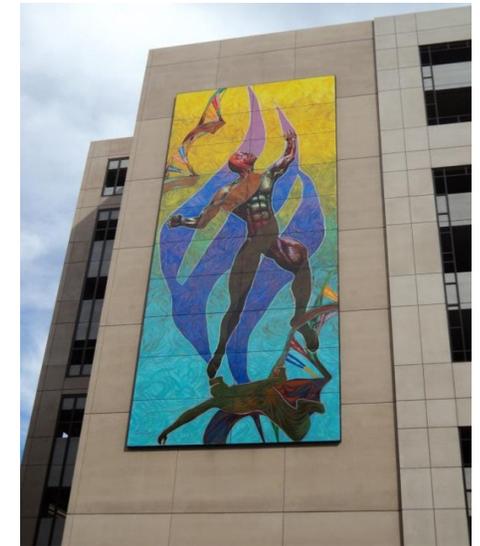


Figure 2.10: Rendering of Ellicott Park



C. Existing Conditions

Definition of Area

The BNMC is located in downtown Buffalo, NY. The campus is bordered by Main Street to the west, Michigan Avenue to the east, North Street to the north and Edward Street to the south (Figure 2.11). The BNMC is within Census Tracts 31 and 25.02.

Affordability

The current food system has created a market where not everyone can afford healthy and nutritious food. Often a choice must be made between eating healthy and paying for other necessities. Community residents' concern with availability, quality and pricing of food indicates some level of food insecurity within the community. Erie County residents spent \$2.1 billion on food in 2010, 62% spent for home consumption and 38% at restaurants. Among home-consumed food, Erie County households tend to spend more on meat and fish than fruits and vegetables. A mere one-quarter of adults in the county consume five or more servings of fruits and vegetables per day, as recommended by USDA.⁸ One assumption of the unbalanced spending on meat and fruits is that limited resources require purchasing of food that provides maximum calories

The estimated weekly cost for food per household of four in Erie County is \$133.40. This suggests that in the Fruit Belt, households making median wage income, about \$20,900 annually, will spend 31% of income on food alone. The 29% of households that make less than the median wage will have more difficulty purchasing healthy food.⁹ Many of those households will cut back food expenses to afford other living expenses, or ultimately purchase cheap, unhealthy food. Many households also depend on some type of federal or community nutrition programs for support.

Transportation - NFTA System

The Niagara Frontier Transportation Authority (NFTA) is a public authority that is in charge of transportation in the Buffalo-Niagara region. NFTA Metro is a light rail system that runs along Main Street and has a stop at BNMC, the Allen/Medical Campus Station (Figure 2.12). In addition to the light rail system there are seven NFTA buses that stop within the focus area. People living and working within BNMC and Fruit Belt area can use transportation provided by NFTA to access food.

Figure 2.11: Focus Area

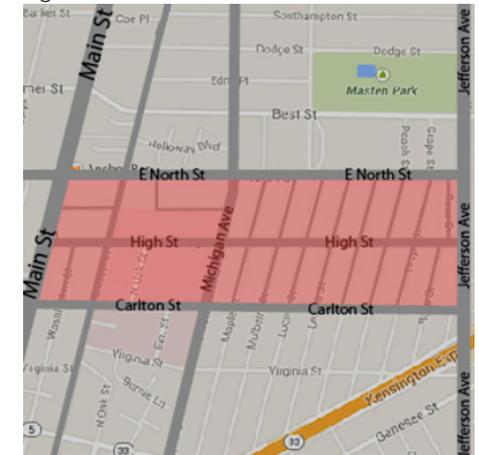


Figure 2.12: NFTA Day Schedule

NFTA Routes in the Area			
Route Name	Runs Mon-Fri	Runs Sat.	Runs Sun.
NFTA Metro	Yes	Yes	Yes
#7 Baynes-Richmond	Yes	No	No
#8 Main	Yes	Yes	Yes
#18 Jefferson	Yes	Yes	Yes
#29 Wohlrs	Yes	No	No
#66 Williamsville	Yes	No	No
#69 Alden	Yes	No	No
#81 Eastside	Yes	No	No

Car Ownership

Car ownership within BNMC and Fruit Belt differs from the rest of Buffalo (Figure 2.13). People who are living in other areas within Buffalo are much more likely to have a vehicle and also to have more than one vehicle per household. More than one-third of households in the City of Buffalo own two vehicles, while only about one-fifth of households in BNMC and Fruit Belt area own two vehicles. People who do not own any vehicles have to find an alternative way to access food. People could use public transportation, walk or bike to access food establishments. Nearly one-fourth of residents living in BNMC and Fruit Belt area do not own a vehicle.

There is a mix of grocery stores, restaurants and fast food in BNMC and the surrounding area. There are available grocery stores where people can purchase fresh produce and non-perishable food so that they can cook rather than going to restaurants. Some of these grocery stores are smaller, less expensive and have lower quality products. The closest grocery stores to BNMC are Holley Farms Grocery, Elmwood Market and Price Rite (on Elmwood Avenue). These stores are on the lower end and do not offer a large variety, however, the basic necessities can be bought at these locations. It is very easy to access these places by public transportation, biking or walking. Holley Farms and Elmwood Market can be accessed by a NFTA bus in about five minutes from BNMC. It can be easy to access PriceRite during mid-day on weekdays; however, it can take up to twenty-five minutes to travel on NFTA and can make it difficult for families, the elderly or the handicapped to travel because a transfer between buses is needed (Figure 2.14).

Tops Friendly Markets, a medium sized supermarket has a location near BNMC and the Fruit Belt. A variety of food is sold at Tops such as fresh produce, baked goods and frozen items; however, there is not a wide variety of healthy items. This location is at the intersection of Jefferson Avenue and Riley Avenue. Although there is a parking lot because many people travel to this market with their own vehicle, it is possible to use NFTA to access Tops. Despite this market being relatively close to BNMC, it can take up to twenty-five minutes to travel using NFTA. On Sunday afternoons, people taking a bus would not only have to transfer once but would need to make a second transfer as well. This can make it difficult for people who cannot stand or walk for long periods of time and it makes it harder to carry grocery packages home.

Wegmans and Trader Joe's are higher end supermarkets that offer a variety of products. Both stores sell a wide selection of organic food ranging from produce, meat and baked goods. The closest stores are difficult to access unless travel is by a person's own vehicle. Both Wegmans and Trader Joes are well beyond the ten minute radius walk or bike ride around BNMC (Figure 2.15).

Figure 2.13: Vehicle Ownership

Vehicles Available	Buffalo	Tract 25.02	Tract 31
No vehicle available	14%	20%	25.60%
1 vehicle available	39%	52.50%	40.70%
2 vehicles available	33.50%	22.80%	20%
3 or more vehicles available	13.50%	4.50%	13.70%

Figure 2.14: Trip Time To Grocery Stores



There are high percentages of people who do not own a vehicle, creating a lesser likelihood of shopping at stores such as Wegmans or Trader Joes. There is a great degree of difficulty in matching up NFTA bus schedules and if accomplished the overall travel can be extremely time consuming. The closest Wegmans to BNMC is located on Amherst Street and Trader Joes is located on Niagara Falls Boulevard. To access Wegmans and Trader Joe's using NFTA, people would need to take two or three buses and it can take up to ninety-five minutes.

Type of Food

BNMC area has many options for people who are looking to get food. Many of these places are sit-down restaurants. These restaurants are local and only a select few are chain restaurants with many other locations. Most eateries are American cuisine. Restaurants around BNMC are easily accessible with many of them being less than a ten minute walk or bicycle ride. One café that is unique in the area is called Code Blu Juice Bar. Healthy smoothies and wraps are on the menu for lunch and dinner and it is not very expensive. In addition this café offers special events such as cooking workshops to show people how to prepare food.

In addition to the restaurants, there are many places to get fast food at a chain store like Wendy's or one of the many café stands in office buildings or medical facilities in BNMC. These kinds of establishments generally do not offer any healthy items; most of the food is processed.

Despite the weaknesses in this area, there are also some positive changes that have been happening in the recent past to help combat the problem of food insecurity. These include the practice of urban farming, community gardens and the appearance of farmers markets popping up in the area.

Community Gardens and Urban Farming

Community gardens and urban farms are two essential methods for combating the problem of food insecurity, especially in the Buffalo-Niagara region. In the Fruit Belt, Grassroots Gardens Buffalo (Figure 2.16), a community garden organization, has community gardens set up on 11 parcels, many established on vacant lots. This aids in providing residents with fresh food, and also improves the aesthetics of the area. Organizations such as Grassroots Gardens are important to teach residents about growing food and also to help source project funding.

Figure 2.15: Fresh Food Within Focus Area

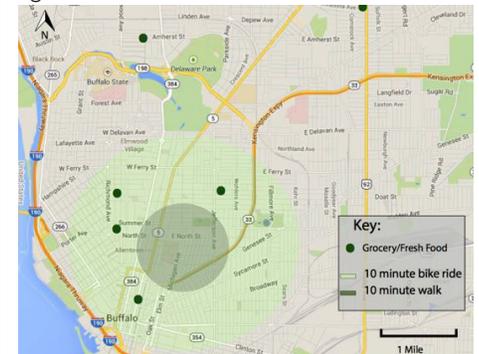


Figure 2.16: Grassroots Gardens Logo



Grassroots
Gardens
of Buffalo

Urban Farming is similar to community gardening but on a larger scale with a more production-based organization. The two largest urban farms in Buffalo are Massachusetts Avenue Project (MAP), and Wilson Street Urban Farm. MAP (Figure 2.17) is an organization that is creating a strong locally independent food system in Buffalo. Their vision is “We imagine a community in which all youth and families have access to fresh, healthy and culturally appropriate food, where people of all incomes have economic opportunities to enrich their lives and support their communities, where vacant lots are transformed into productive green spaces, growing food to supply local residents and beautify neighborhoods, where youth and their families are engaged in policy development and planning for the restoration of land and their communities.” They set out to achieve their vision in many ways, which includes their “Growing Green Youth Program” and their “Growing Green Urban Farm”. They are teaching underprivileged youth valuable skills in how to make the food system more local and sustainable in order to have a healthy community. The farm is located on 13 empty lots that cover over an acre on the west side of Buffalo. The kids work together to grow, market, and distribute produce for the area. This work teaches the children valuable retail skills and how to become more self-sufficient through food production. MAP also has education programs to teach children and their parents the importance of healthy living and eating local food. Wilson Street Urban Farm is on the east side and is smaller than MAP. Food grown here is also distributed to the community that is poverty stricken.

The urban farms and community gardens are extremely important in these areas. As stated before, the lack of grocery stores in low-income areas such as the Fruit Belt often leads to food insecurity and unhealthy residents. The gardens and farms help make fresh produce much more easily available. Another asset in making produce more available are the local farmers markets. In the area surrounding BNMC and the Fruit Belt there are currently four farmers markets that are close and some are within walking and biking distance. They are the

- Elmwood-Bidwell Market
- Allentown Farmers Market
- Downtown Country Market
- Roswell Farmers Market (located inside BNMC)

The farmers markets (Figure 2.18) in this area are extremely important in ensuring residents are able to access healthy, local food.

Figure 2.17: MAP Logo



Figure 2.18: Farmers Markets, City of Buffalo



Elmwood-Bidwell Farmers Market is located on Elmwood Avenue and Bidwell Parkway. This market is open 8 a.m. - 1 p.m. Saturdays, May through mid-December. It offers vendor produced or grown fruit, vegetables, dairy products, natural meat, baked goods, honey and more.

Allentown Farmers' Market is open every Friday, 4:00-7:00 p.m. May 30 through October 31 and is located at 440 South Elmwood Ave. They have locally grown vegetables and fruits from local growers and organic farms and fruit, fresh organic eggs, Amish made honey, jams and jellies, gluten free pet treats, hand mixed spices, locally roasted coffee from Public Espresso and locally grown flower and vegetable plants. Plus they also have healthy grab and go take home meals from Quaker Bonnet and fresh, local vegan veggie burgers from Go Veggies.

Downtown Country Market is located on Main St. between Court and Church St. and is open 8 a.m. - 2:30 p.m. Tuesdays and Thursday, May 19 through October 27. They sell fruit and vegetables, baked goods, flowers, pet foods and homemade pierogies. This market accepts WIC and Senior Nutrition coupons which many people in this area use.

Roswell Park Farmers Market takes place in the courtyard in front of Roswell Park Cancer Institute and is open Wednesdays 11:00 a.m. - 2:00 p.m. They have 18 different local vendors selling fruits, vegetables, plants and more.

This area has a food system that is very fragile and unstable currently. There are many actions in place to help turn this problem around and create a stable food system in an area that is financially struggling. Support from organizations like MAP is crucial because they are one of the biggest driving forces for change inside the neighborhoods. Use of community gardens, urban farms and farmers markets can help change the food system for good and give the residents of the neighborhood a strong local food system.



D. Food Security

Fresh food and healthy food has been a growing trend not only at a national scale but also regionally and here in the Buffalo area. The access to fresh food and the options for healthy food choices have been a growing topic in the health world today. More and more people are losing the natural instinct for eating healthy and fresh food and instead are turning toward food that is cheap, unhealthy, easy to access, and socially acceptable. Neighborhoods, especially in Buffalo, are forced to settle for the convenience of local corner stores whose options are scarce rather than fresh food options which are mostly found in a larger grocery store such as Wegmans or Tops. The Fruit Belt is an example of the scarce choice of healthy and fresh foods. With residents forced to choose between long trips to a grocery store with healthier and fresher options, and close, convenient corner stores with processed and unhealthy foods, many choose convenience over health. So how do we reverse this thinking? Buffalo Fresh is going to be a great resource not only for local residents but thousands of employees, doctors, patients and their families from the BNMC to have the access to fresh foods and healthy options. Not only will this establishment bring fresh food and knowledge about healthy food options but also it will bring a sense of unity for the neighborhood, the Fruit Belt and the growing BNMC. It is important to set an action plan that involves not only the community but the people that will be working and attending the medical campus on a daily basis. This hub for fresh and healthy food will change the dynamic for not only the Fruit Belt but for future neighborhoods in the region to continue to push the importance of a healthy life with healthy choices, to better our communities and in turn our city for years to come.

Zoning

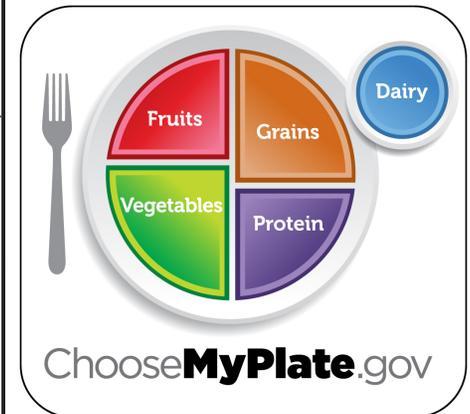
An agricultural district, where many local farms produce fresh food and crops, surrounds the City of Buffalo. These local farms distribute their products to many grocery stores around the region. The belief that a corner store only sells processed, canned, sugary, and frozen items is something that can be changed within local neighborhoods themselves. Corner and convenient stores could start carrying small sections of local fresh foods such as fruits and vegetables to give customers healthier choices. This change could really impact neighborhoods in becoming healthy and reverse trends that are affecting our nation. Buffalo Fresh will provide education to not only the local residents but also to BNMC. It will encourage healthy living and provide an option of fresh food to those who previously would not have had that option.

Importance of a Balanced Diet

Fresh food is extremely important to maintain a healthy human body. Eating habits have been directly related to many health-related issues from obesity, high cholesterol, diabetes, and premature births, to even early death. Not only is it important to eat healthy but it is also important to maintain a healthy lifestyle through daily exercise and good habits. Fresh foods such as fruits, vegetables, dairy, meat and other whole foods give our body the essential nutrients it needs to survive and live a long and healthy life. Some foods have specific nutrients only found within that food so it is important know how to incorporate all of these foods into our diets. These whole foods all belong to MyPlate (Figure 2.19) which was created to help people understand the types and quantity of the food they should be eating. The USDA created a graphic to symbolize the amount and types of foods you should be incorporating into your diet for a healthy body. MyPlate is broken into five main categories: grains, vegetables, fruits, dairy, and protein.⁹ According to MyPlate, half of our plates should consist of fruits and vegetables. This recommendation poses a challenge for people without reliable transportation. Residents often have to travel long distances on an infrequent basis to get items such as fruits and vegetables. Often stores that are closer and take less time to get to offer less healthy options and force residents to settle for what is sold in corner stores. The five main MyPlate categories have been proven to be the most nutritious foods for our body, however our access to these foods is sometimes scarce and difficult to find. As a result of this Buffalo Fresh will be a hub not only for fresh food education, but distribution and consumption. Buffalo Fresh will allow more access to fresh foods in local communities eliminating long distance travels to access fresh foods.

The definition of fresh food, according to the FDA, is as follows, “the term ‘fresh’, when used on the label or in labeling of a food in a manner that suggests or implies that the food is unprocessed, means that the food is in its raw state and has not been frozen or subjected to any form of thermal processing or any other form of preservation.”¹⁰ Fresh foods are found in every grocery store typically in a section called produce. Also the meat, dairy, and some frozen food sections have fresh food. Fresh foods are delivered to grocery stores from all over the area. Locally, in Erie County, there are farms that surround us and produce some of our fresh foods and produce. They deliver these fresh products not only to local farmers markets, but to restaurants and grocery stores. Corner and convenient stores typically do not stock fresh foods because of their quick shelf life. Fruits and vegetables go bad quicker and sometimes attract bugs and insects if not stored and displayed properly. This makes it more difficult to present and sell such products.

Figure 2.19: MyPlate



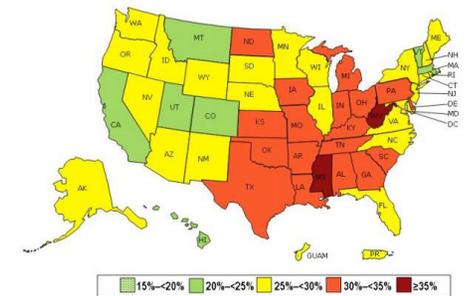
Impact on Chronic Diseases

Obesity rates in the United States have been on the rise for quite some time now, especially in youth. Obesity not only is an epidemic that as a nation we are having difficulty controlling, but the problems that are linked with obesity are also rising such as diabetes, heart problems, high blood pressure, and much more. According to the Center for Disease Control (CDC), the majority of the United States falls in the middle to high range for obesity (Figure 2.20). This major trend is something that, as a city and community, we can begin to take action on. According to County Health Rankings, Erie County’s obesity rate is 29% compared to the rate of New York State at 24%.¹¹ Buffalo Fresh will be the central location for residents and local employees to come and learn about healthy eating habits. Fresh produce will be grown on site at a community garden. At Buffalo Fresh people will learn about healthy recipes that are simple and delicious. Buffalo Fresh will form a headquarters for the community to rally together to take on issues such as obesity and other health and diet-related concerns. Being able to influence community members to be more active and healthy will not only improve health but unite communities together. Families will be able to choose fresh options and learn together the benefits of eating healthy and living a healthy lifestyle. An increase in physical activity as well as eating right and managing substances such as alcohol and tobacco can also affect the overall impact of health. Fresh food should be seen has a first option that is easy to access as well as delicious to consume making meals more attractive. It is also important to teach children to be healthy and live a healthy lifestyle. This can be started in schools where children spend about half of their day. At Buffalo Fresh, children will be able to take field trips to learn about food and the fresh and healthy options that are available to them. As Buffalo Fresh continues to grow within the community it can become a model for other neighborhoods around the city and may inspire other communities. Fresh food is an extremely important part to our society today, not only the consumption but the knowledge and distribution of fresh food is also critical to improving the lives of our citizens. Starting on a small scale, Buffalo Fresh will provide the framework for future establishments to come.

Trends in Food Security & Insecurity

A major aspect of the food system is the state of food security in a city. The term food security has become more mainstream in recent years. Food security refers to all people at all times having physical and economic access to adequate amounts of nutritious and culturally appropriate food for an active and healthy life.

Figure 2.20: Obesity in the United States
Prevalence* of Self-Reported Obesity Among U.S. Adults by State and Territory, BRFSS, 2013





The food should be produced in a sustainable environment and people should be able to make informed decisions about their food choices. Food security also means that people who produce the food are able to earn a decent living wage. At the core of food security is access to healthy food and optimal nutrition for all. Food access is closely related to food supply which is dependent on a healthy and sustainable food system. People who have access to adequate food but are limited by a lack of money or other resources are considered food insecure. The forces challenging food security include demographic change, high and volatile food prices, land and water constraints, and climate change.

Food security is one of the most fundamental indicators of quality of life within a community. There are many people in Buffalo who do not know where their next meal is coming from or if that meal is coming at all. In Erie County, the food insecurity rate is 13 percent, which is slightly lower than New York State. The type of household is an indicator of the level of food security within the household. Households that are less food secure are households with children, headed by single parent, and/or consist of minorities such as African Americans, Asians, or Hispanics. People living in poverty also have a high rate of food insecurity. Individuals who lack reasonable access to affordable quality food often have health problems associated with malnutrition. Among the many reasons that a community may have limited access to healthy food is the lack of affordable and accessible transportation options to access quality foods and a proliferation of unhealthy eating options.

Programs

There are many federal and state funded nutrition programs to assist those who are in need of acquiring healthy food. Households with limited resources can employ a variety of methods to help meet their food needs. There are four major food assistance programs available for eligible Erie County residents:

- Supplemental Nutrition Assistance Program (SNAP)
- Women, Infants, and Children Program (WIC)
- National School Lunch Program (NSLP)
- Senior Farmers' Market Nutrition Program (SFMNP)



Supplemental Nutrition Assistance Program (SNAP)

The Supplemental Nutrition Assistance Program (SNAP), formerly called the Food Stamp Program, provides monthly benefits for all eligible low-income households to purchase approved food items at authorized food stores. In the Fruit Belt, 49% of families are living in poverty and 41% of households have collected SNAP benefits.

The average benefit is about \$133 per person per month which barely covers the cost for basic food.¹⁰ Although the program solved hunger problems for many low-income families it still has limitations. Not every grocery store or supermarket accepts food stamps. Some smaller and independently owned grocery stores do not have this option. If people want to use their food stamps they have to travel to another grocery that does accept food stamps. In the Fruit Belt and BNMC area there are very few grocery stores or supermarkets within walking distance. Therefore people on this program have to travel further in order to buy food. This extra travel puts a burden on residents. This burden speaks to the food insecurity in the Fruit Belt and the Buffalo Niagara Medical corridor.

The distribution of those who use food stamps is very dense in the City of Buffalo and decreases as it extends out towards the suburbs of Erie County. The Fruit Belt is within the denser sections of the county. This shows how the use of food stamps is weighted towards those who live in the city. These people rely on the public program to get access to food even if that food is not healthy.

While demand for SNAP in Buffalo has leveled off in recent years for families with children, households with seniors maintained a double-digit increase between 2010 and 2012 in Buffalo.¹² Many older residents are relying on food stamps to support themselves while their social security benefit covers their other living expenses. There are many seniors eligible for the program but not receiving any benefits. Many of them complain that the process for applying the program is difficult. They feel the application questions about their households are too personal or too intrusive. Some were confused about the eligibility of the program or did not know how to calculate their income after all the deductions. While there has been a sharp increase in older residents receiving food stamps, those at the other end of the age spectrum are also in need of food. Nearly one of every four households with children in Erie County receives food stamps.

One single mother with three sons all under the age of 10 receives \$541 a month. She was receiving \$600 before SNAP benefit cuts were made in the Farm Act of 2014. She only feeds her children breakfast and dinner and sends them to the community center in the summer for free lunches. They get free lunches at school during the school year. That is still not enough for her to support her children; she goes to the food pantry at her church at the end of every month to receive pre-bagged groceries, which include canned goods and sometimes fish.

Due to the high concentration of poverty in the Fruit Belt over three-quarters of the population receive SNAP. It is used in the form of an EBT card and is accepted at most grocery stores in Buffalo. Although, due to lack of private transportation, corner stores are often the most viable option where healthy foods are not always an option. Public transportation is available but is often inconvenient due to multiple transfers and frequent stops along the way. In addition to the time inconvenience the bus can be costly for a family who is living below poverty. According to NFTA, a one-month bus pass costs \$75.00 for an adult and \$37.50 for a child. For a family of four it would cost \$225 per month. This expense can be costly for people living in poverty.

Women, Infants, and Children Program (WIC)

Similar to SNAP there is a special supplemental nutrition program targeted specifically toward pregnant women, infants and children under the age of five, commonly referred as the Women, Infants and Children Program (WIC). New York State provides vouchers to participants to use in order to acquire supplemental food packages at authorized food stores (Figure 2.21). They also provide health care referrals and nutrition education to participants. WIC allows the participants to purchase canned and packaged fruits and vegetables in addition to fresh produce. It also expanded WIC-authorized vendors in Erie County so that people have more choice to purchase healthy and affordable food.¹³ In a study done by the University at Buffalo Center for Urban Studies, 36% people surveyed in the Fruit Belt stated that WIC eligibility is an important factor they consider when grocery shopping.¹⁴ This is important as it shows how this program impacts a decent amount of those living in the Fruit Belt. It is also a reflection of the current system and the necessity of this program to ensure food security.

National School Lunch Program (NSLP)

The National School Lunch Program (NSLP) provides free or reduced-price lunch to low-income students. 33% of students in Erie County are enrolled in this program. In Erie County, NSLP also provides students with free breakfast in all the districts. The meals are the same for all students and none of the students may be identified or discriminated against in any way. During the summer months when students are out of school many community organizations provide free nutritious meals to students under 18. Activities are also offered to students who participate in the program to ensure students to stay active and be healthy.¹⁵

Figure 2.21: WIC Program Logo



Senior Farmers' Market Nutrition Program (SFMNP)

During the harvest seasons, from May to October, there is a special nutrition program that provides assistance to purchase food for low-income seniors over the age of 60. Senior Farmers' Market Nutrition Program (SFMNP) provides eligible seniors with vouchers that can be used to purchase fresh fruits and produce at authorized farmers' market, roadside stands and community supported agriculture programs. This program not only helps those seniors in need, it helps in expanding or developing new farmers' markets and roadside stands. It also encourages people to purchase and consume local food.

These programs assist hundreds of people living in the City of Buffalo. They are essential for those who are participants of the benefits. However, the fact that there are many people relying on these programs in order to have access to healthy food shows how the current system is not sufficient enough to provide all people with affordable food. It is also important to realize how the food stamp program does not give recipients the option of purchasing healthy food. While this program is in wide use and does help hundreds of people, some of which are living in the Fruit Belt, the program only allows people to buy food not quality food. Healthy food is not consistently available despite being on public assistance.

Transportation and Chronic Diseases

As stated earlier, having a healthy diet and lifestyle are important because of the chronic illnesses associated with a bad diet. The Center for Urban Studies headed by Dr. Henry Taylor at the University at Buffalo is undergoing a research study to develop a public health assessment for the Greater United Ministries (GRUM) in Buffalo, NY. The study was designed to provide GRUM, along with the Greater Buffalo United Accountable Healthcare Network, with an interactive health care network for those in the City of Buffalo. This study was done through surveys and small group interviews. These two methods ask the residents questions about what they eat, the amount of exercise they get, how they get to the grocery store, where they shop as well as personal health and demographic information.

One of the clusters in this study is located in the Fruit Belt. According to this study there is a high reliance on the use of personal vehicles to get to the grocery store. Very few participants answered that they get to the grocery store using the bus or relied on a friend. One person indicated they use Buffalo Car Share. This indicates the current system is designed for those with



cars. If this were not the case more participants would have answered that they use alternatives means of transportation.

The survey also asked participants if they have any chronic diseases. According to this study, participants suffer from diabetes, asthma, high blood pressure/hypertension, high cholesterol, obesity and arthritis. With the exception of arthritis, these chronic illnesses are in part or completely diet-related conditions that arise from poor nutrition and inactivity. With the existence of these chronic illnesses in the Fruit Belt, one can see that the food system in the focus area needs improvement. With this improvement, residents in the focus area of the Fruit Belt neighborhood will have access to better living styles which can in part be provided by Buffalo Fresh.

Design of the Environment

An important aspect of living a healthy lifestyle is having access to healthy food and a transportation system to support it. The transportation system has a large impact on the accessibility of healthy choices for city residents. Multiple modes of transportation available is inclusive to more groups of individuals and makes for a more successful transportation system. Being that many cities in the United States are built for the automobile, this forces people to purchase personal vehicles and disregards those who cannot afford their own vehicle. Erie County is an example of such a built environment. This is in large part due to the automobile-dependant design and planning. The county has an air pollution percentage of 12% compared to 11% for New York State. This is an important aspect as the quality of the air effects the health of people, especially those who walk or bike as their main mode of transportation. The County Health Ranking also calculates the percentage of those driving to work alone. This is 81% for Erie County compared to 54% for New York State.¹⁶ This is representative of the amount of driving done in Erie County. If the built environment was designed for multi-modal travel this percentage would be lower. This is important for food systems planning as it shows how those who wish to travel efficiently within Erie County need to have their own vehicle. Being able to get around easily is essential as it gives citizens the options of different places to shop for food instead of limiting them to a few stores. Those with cars have the ability to choose between different store options. They can drive to stores that sell fresh food if they live in a neighborhood where such an establishment is not located. In order to improve Buffalo's food security the design of the transportation system must be improved at the county level. This would allow the food system of the city and surrounding suburbs to be effective as a whole instead of a set of disconnected areas where few people are given access.

Statistics of Low Access

The County Health Rankings analysis is consistent with the access statistics calculated by the ERS Food Atlas. However, this data has been aggregated down to the Census Tract level. The tract where the Fruit Belt and Buffalo Fresh are located has 2,064 people with low access to healthy food choices. Of those people 1,416 people are also living with low incomes. There are also approximately 500 children in this area with low access to healthy food. The level of access to healthy food is, in part, a reflection of the effectiveness of the transportation system.

Part of the reason such a large number of people have low access to healthy food choices is because the transportation system does not allow for easy access to stores that sell this commodity. According to the ERS Food Atlas “some people and places, especially those with low-income, may face greater barriers in accessing healthy and affordable food retailers, which may negatively affect diet and food security.”¹⁷ The transportation system needs to be improved in relation to the BNMC and the Fruit Belt in order to give those living in the area better access.

The transportation system and built environment in Buffalo has created a disconnect between farmers and consumers. Currently only 2% of residents with low vehicle access in the City of Buffalo are within walking distance from a farmer’s market. The current system causes farmers to use intermediaries to sell their product. These grocery stores may not be accessible to residents with low access to a vehicle. It is important to strengthen the distribution sector in order to reconnect local farmers and residents/consumers. Doing so will promote economic development and increase the availability of healthy foods to residents who may have trouble getting to quality grocery stores in the current system.

Definition of Food Access in terms of Food Store Type

Food access plays a vital role in the food system. According to the American Planning Association, “Food access is not simply a health issue but also a community development and equity issue. Researchers often agree on the components of food access being:

- (1) Nutritionally adequate, culturally appropriate, and affordable food;
- (2) Income sufficient to purchase healthy food; and
- (3) Proximity and ability to travel to a food source that offers such food.”¹⁸

Food retailers play a vital role in healthy food access. There are four main types of food retailers and they include restaurants, supermarkets, grocery stores and corner stores. The restaurant is the establishment where single meals are served to customers. The supermarket is a large form of retail that sells food and household merchandise. The grocery store is a retail store that sells food as its main commodity. The corner store is a small retail store, often located on a corner of a street, which sells food and other daily necessities. Due to the small scale nature of corner stores they are known for selling unhealthy food and snacks.

Food Security

The current trends of the food system in the Fruit Belt and the immediate area surrounding Buffalo Fresh show the issues with access to healthy food for those living in this area. Fresh food is essential to the state of one's health. However, fresh food is not always a choice for residents. There are several factors for this. One reason is the public assistance programs that are available, while being helpful in many respects, do not always ensure the recipients get the choice to purchase healthy food. Some public assistance programs also put the burden on the recipient, as not all supermarkets accept public assistance vouchers. As a result, the recipient is forced to travel possibly farther in order to get to the stores that do accept public assistance vouchers. The transportation system in Buffalo also has an impact on the accessibility to food for those living in the Fruit Belt. The Fruit Belt does have limited access to the light-rail line and the bus system in Buffalo. However, the area is extremely car dependent, which is a problem for those living in the area who live in low income households and often do not own a vehicle. It should also be noted that walking to a grocery store is not an option as there are more restaurants and corner stores and no close supermarket in the focus study area. Finally, these restaurants and corner stores do not give the residents inexpensive and/or healthy options. The current food system in this area is not working to provide the citizens with adequate food security.



SECTION 3

Design Proposal

*Adaptive space designed for comfort and sustainability;
efficient in design and functionality.*

A. Interior

There are many pieces that need to come together to create the welcoming, multi-functional interior of Buffalo Fresh at the Green Commons (BFGC). The space primarily has to be functional. In order to have functionality, implementation of the proper tools, space usage and layout must occur. The newly designed interior has a 'fresh' aesthetic, while simultaneously complimenting the building and its historical character. The physical location of the building is adjacent to two historical districts, and the building design should pay homage to this aesthetic. This means a blend of eclectic and traditional design styles, such as brick facades and cladding, with a mix with modern fixtures and detailing.

While designing the interior of Buffalo Fresh, it is important to understand that it has a multitude of activity and public uses. This creates the necessity of an accommodating and adaptable space. The interior cannot be geared toward one specific use and it must be able to evolve. If the space were to be static, it impedes the function and usefulness. This poses a design issue, as there is not an infinite amount of space (Figure 3.1).

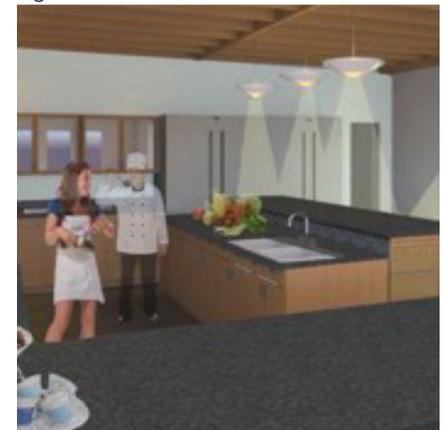
One major component of Buffalo Fresh will be a full sized, state of the art commercial kitchen. These kitchens are composed of multiple parts and have an array of appliances. Some of the larger appliances include sizable walk-in refrigerators and large range tops with multiple burners. Smaller pieces include storage shelves and washing sinks. The commercial kitchen uses are numerous and available to multiple individuals. The kitchen acts as a food incubator for new business start-ups and educational classes. For this reason, having bar seating around the kitchen creates an intimate and productive setting for classes. This permits the viewers to be very close to the action, allowing for involvement. The seating is also utilized for dining and meeting space.

A commercial kitchen (Figure 3.2) acts as a tool for utilization by many and it is projected to bring in new businesses and customers to the area. There are also negative implications that may come along with such an advanced space. These kitchens consist of large and robust machines, which can be overwhelming for the untrained professional. For this reason, an educational kitchen has been figured into the interior design. This kitchen contains simple, key appliances that majority of people use on a regular basis. The vision here is a simple kitchen that someone can use quickly without the need to ask for any type of assistance. It consists of consumer grade appliances rather than equivalents of the potentially disconcerting commercial grades. Being that it only consists of a few smaller appliances, the kitchen is easily housed in a corner of the interior without sacrificing precious square footage inside the building.

Figure 3.1: Seating Style is Flexible



Figure 3.2: Commercial Kitchen



Proper and adequate eating accommodations are also a necessity within the space. Although there will be seating outside, people will long for the comfort of eating inside during the colder months, as well as protection from the sun and the heat in the summer. Cafeteria-style seating can be productive, but it does not always function. For Buffalo Fresh, a moveable, modular dining area is essential. Something as simple as moving a chair a few inches one way, or moving a chair to the exact, desired distance from the table, can give the user an overwhelming feeling of customization and comfort. Smaller tables with detached chairs for individual or collective group use create a functional design and user-friendliness. A full-page spread of the Buffalo Fresh plans are included in Appendix D.

Since Buffalo Fresh is an organization, function is imperative to the design, as well. This is where the second floor can play a major role. The upper floor is excellent space for the operational functions of the organization. This also separates the customers, employees and other potential businesses that are utilizing the main floor. Buffalo Fresh can be running seamlessly downstairs on any given day, while the upstairs is being utilized to conduct meetings and other programmatic items.

The second floor is spacious and holds potential for being a co-working space. An office installed for work directly relating to Buffalo Fresh exists cohesively with conference space. The room can be a convenient way for potential partners, and other groups or sponsors, to come talk to individuals and users at Buffalo Fresh. This creates a professional setting as well as an onsite location for conferences and appointments. These are the design overviews for the interior of Buffalo Fresh. The bones of the building are exceptional and the character of the building creates an exceptional backdrop for the new interior.

B. Exterior

The exterior space between Buffalo Fresh and the Transportation Hub is shared space for the two components of BNMC Green Commons and a few uses are imperative to its functionality. These include space for bike parking, and a bike workshop, as well as outdoor multi-functional space for Buffalo Fresh. The goal of designing this space is to make a pedestrian friendly and inviting environment that people utilize as a haven within the area (Figure 3.3).

First, it is vital there is a sign of designation for the comfort that Buffalo Fresh will offer to the residents of Buffalo. The welcome sign, allowing frequent users and passers-by, alike, the opportunity to utilize the space, divides a wide pathway leading into the green space between the two buildings. There is covered bicycle parking on the side of the building (Figure 3.4), in addition to a double-sized shed for a bicycle maintenance facility at the end of the space. Open space closer to Buffalo Fresh contains tables and chairs for use by dining patrons and visitors, which can easily move to accommodate the user groups. Additionally, a portion of the wall on the south side of Buffalo Fresh - the exterior side facing the shared-use green space - is painted white so that it may be used as a projector screen for programs or meetings. Green space construction, here, is to promote 'naturalness' within a structured environment, and is allowed to flourish as it would in a natural landscape. Material use for pedestrian walkways is permeable pavement, broken up by grass-like flora, with cobblestone accent to keep the historic character true to the site.

Furthermore, addressing ADA accessibility to Buffalo Fresh and basement access for storage use is essential in the design. On the north side of the Buffalo Fresh building, there is ample space for placement of an ADA-compliant access ramp. As a nod to the building's historical fabric, the ramp is to be built with brick and eco-friendly permeable grout. The stylistic touches can be seen throughout the re-design of the space as well. The basement has a short clearance height, but utilized as a root cellar it becomes an essential component for year-round food storage. Basement access is outside and separate from building entrances, to aid in the circulation of the site, specifically thinking about inventory replenishment. In the green space in front of Buffalo Fresh, there is room for vendor stands and seating for relaxation. The more space for people to gather their food, the better and more likely they will visit.

Figure 3.3: Aerial Plan for Buffalo Fresh

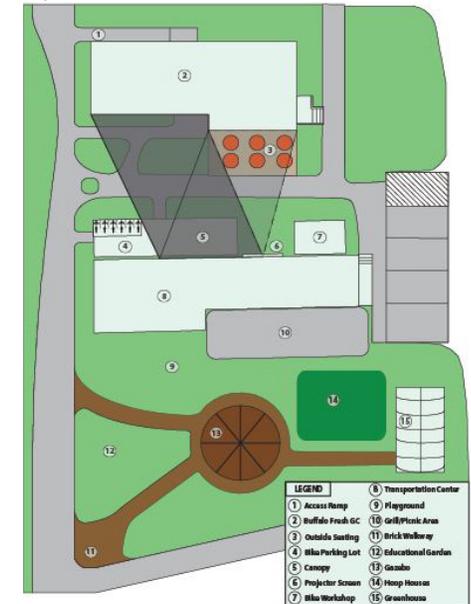


Figure 3.4: Bicycle HUB Parking



C. Corner Lot Space

The corner lot (Figure 3.5) is a key piece of Buffalo Fresh because it is the showcase; it is the first location people see when arriving at BNMC Green Commons. This space has an educational and functional garden, along with a hoop-house or greenhouse for year-round food production. The design of the garden is on a radial plan, mimicking natural systems, with a gazebo at the center. Functional planters growing seasonal, local produce surround walking lanes that radiate from the gazebo. Use of the garden is for educational classes on planting, maintaining, and harvesting produce and herbs. Although this community garden is completely functional, the indoor growing area is the powerhouse of food production. Local growers can rent the greenhouse or hoop-house for mass food production in an urban setting. The corner lot of Buffalo Fresh is a space that is beautiful, functional, and educational.

Pedestrians, cyclists, and drivers alike see this lot as the visual representation of Buffalo Fresh. In turn, the design emulates a visually appealing and fully functional space. The corner lot design (Figure 3.6) exists in two sections: a community garden and an exterior food production structure. The community garden layout is a radial design, centered on a gazebo. The gazebo draws visitors as a place to eat lunch, read a book or casually socialize. Moveable furniture and picnic tables will also be scattered throughout the garden area. In the gazebo, sectioned garden beds growing a variety of fresh produce and herbs surround visitors. This community garden is fully functional, but its main purpose is to be educational. The separated beds are a perfect teaching platform for adults and children alike. Education is a major tenet of Buffalo Fresh at the Green Commons' mission, and this site is an ideal place to hold classes on gardening, garden maintenance and harvesting. The walkways that weave throughout the gardens maintain the visual and historical integrity of the buildings by using brick throughout. The brick is complimented with permeable grout, a method that is both environmentally friendly and sustainable.

In the winter and offseason, the community garden's uses include social gatherings and events, such as a Christmas tree lighting. Year round programming is extremely important for this area, because an empty landscape for an entire season is both functionally inefficient and visually unappealing.

The functional powerhouse of the corner lot is the exterior food production structure. Either a hoop-house or a greenhouse, this structure will be a major urban food production center. The University of Nevada Cooperative Extension cites potential yields for similar indoor growing structures: 2.58lb per square foot of tomatoes, 4.5lb per square foot of golden zucchini, and

Figure 3.5: Vacant Corner Lot



Figure 3.6: Exterior Layout Example



0.97lb per square foot of kale. With these yields, the Buffalo Fresh greenhouse could produce 516 pounds of tomatoes, 900 pounds of golden zucchini, and 194 pounds of kale, all in one growing cycle!¹⁹ With year-round growing capability, the Buffalo Fresh greenhouse is set to be the cornerstone of urban food production in Buffalo. Local farmers may rent this structure to start an urban food production sector for their business. This is economically beneficial to both parties because farmers get a state of the art indoor growing area for a reasonable price and Buffalo Fresh can easily oversee the operations without the need for a large staff. Year-round urban farming is a concept that is new to the City of Buffalo, but it is expected to be quite fruitful.

The corner lot borders the BNMC Green Commons Transportation Hub, and the southern façade is an open canvas that is fully visible from the intersection. There will be vertical growing infrastructure along the facade with a complimentary mural as the backdrop. This eye-catching feature will draw visitors to the garden, and BNMC Green Commons, as a whole. The plan and layout of the corner lot is included in Appendix D.



SECTION 4

Programming

Built on existing policies to create sustainable connections to the community; full incorporation of the community into programming efforts.



A. Policy

The heart of the City of Buffalo is currently changing and ultimately geared toward the expansion of the Buffalo Niagara Medical Campus (BNMC). This campus has the potential to house a number of new buildings, including Buffalo Fresh, in hopes of positively changing the city itself and the residents within. With Buffalo Fresh as the core, BNMC has an opportunity to directly connect to the surrounding neighborhoods by incorporating all aspects of healthy eating and active living into the lives of the city's residents.

The City of Buffalo has recently seen a surge of interest in development and re-development. This redevelopment is seen by many as a rebirth, similar to an internal renaissance. This rebirth is possible as it comes together in the BNMC: a key component that will not only better the healthcare industry in WNY as a whole, but also in the surrounding regions. While similar large scale developments have had huge benefits for the greater good of any city, it is important to understand these surrounding neighborhoods are also a source of community interaction. With the Fruit Belt lying just east of the BNMC, it is vital to build a strong connection between these neighborhoods as the BNMC moves forward.

A vital component of this connection can be found in the development of BNMC Green Commons. In collaboration with National Grid, BNMC was awarded a \$1 million grant from the New York State Energy Research and Development Authority (NYSERDA) to re-use three historic properties in order to showcase sustainable practices.

Vital components for this project's programming can be found in three documents:

- Buffalo Niagara Medical Campus Master Plan
- Four Neighborhoods, One Community Plan developed by BNMC
- Buffalo Green Code

It is important to note the Buffalo Green Code, at its current stages, is still in the final process of development. Despite this, it is an important component to keep programming aligned with city guidelines.

The first document to be examined is the BNMC Master Plan. In order to understand BNMC Master Plan's sense of direction, an excerpt below highlights the vision and mission of BNMC along with their principle guidelines.



MISSION: To promote knowledge based transformation of Western New York through the bio-medical research, education, clinical practice and entrepreneurship of its member institutions.
VISION: To be a magnet of opportunities attracting and retaining the best and the brightest.
PRINCIPLES: We will respect the individual mission and identity of our members and associated organizations. We will pursue preeminence in all endeavors related to our mission. We will communicate and coordinate effectively. We will support regional development beyond our campus boundaries, reflecting our member's total composition and initiatives. We will engage our surrounding neighborhoods to enhance diversity, inclusion and community revitalization. We will create an environment that will seek cooperative collaborations and community solutions. We will be leaders in sustainability. We will ensure a clean, safe, friendly and healthy environment.

An important piece of this excerpt can be found within the principles as BNMC displays their willingness to support regional development beyond campus boundaries. Additionally, BNMC hopes to be a collaborative partner in the efforts to help stabilize the Fruit Belt during these changes.

The second document to be examined is a segment of the BNMC Master Plan itself. This segment outlines how BNMC plans integration of the four linking neighborhoods into what would be one cohesive community. To understand the Fruit Belt it is important to understand how the area was shaped over time.

The Fruit Belt illustrates an area similar to Buffalo and is rich in history. Neighborhood roots of the Fruit Belt can be found in the name itself, extending back in time to when the first residents were of German descent seeking religious refuge, planted numerous orchards. This legacy is seen today throughout the Fruit Belt in the form of street names such as Cherry and Lemon. This neighborhood was home to more than 10,000 residents who lived a vibrant life during the booming industrial era. Over time the city changed and continued to grow outward, and the neighborhoods followed suit. Today the Fruit Belt is a neighborhood mainly consisting of African-Americans. Buffalo Fresh provides an opportunity to give refuge from the modern day struggle of finding healthy food options. Allowing for a deeper connectivity between BNMC and the Fruit Belt is stressed in the document "Four Neighborhoods, One Community." In an excerpt found below, BNMC stresses this relationship: "The Fruit Belt could become a demonstration community for the City of Buffalo where focused resources can bring about real and lasting revitalization."²⁰



The aforementioned excerpt illustrates the need to connect the neighborhood and its residents. This can be identified through such tools and ideas such as:

- Creating a community development organization
- Establishing a land bank development
- Building a unified voice
- Amending the regulatory environment
- Creating a workforce strategy

These ideas and guidelines are important to note as they are further reflected in the Buffalo Green Code.

While it is understood that the Buffalo Green Code²¹ is not fully in place, it is the most reliable template for future growth within the city. The Green Code is a vital plan that identifies previous shortcomings within the city. Updating the stagnant plan from the 1970's is essential in determining future growth of the city. The four guiding principles that can be found within the Buffalo Green Code are as follows:

- Fix the basics (Simple fixes)
- Build upon the assets (Working with what we have already)
- Implement smart growth
- Embrace sustainability (Buffalo Green Code)

These four principles are guides that can be implemented on a micro scale in the development of Buffalo Fresh.

The Buffalo Green Code components are broken down into six different sections:

- Land Use Plan
- Unified Development Ordinance
- Local Waterfront Revitalization Program
- Brownfield Opportunity Areas
- Urban Renewal Plans
- Generic Environmental Impact Statement

Each section is then broken down into further components, each focusing on a variety of topics relating back to the four main principles. Utilizing the Buffalo Green Code to its fullest potential will ultimately be beneficial in the success of BNMC Green Commons. In reviewing the three documents there are many points that can be adapted and directly related to the programming

of Buffalo Fresh. The crux of the documents, BNMC Master Plan, Four Neighborhoods, One Community Plan developed by BNMC and Buffalo Green Code all aim to create connectivity among the neighborhoods. The four principles of the Buffalo Green Code give a strong example of what should be examined in the future.

B. Integration

Taking the basic needs to implement solutions will create more effective growth in the future. To be successful, education within Buffalo Fresh will need a micro scale plan that provides potential positive growth. For example, Buffalo Public City Honors School is located in the Fruit Belt. Providing Buffalo Fresh with the opportunity to partner with City Honors may create a program that works directly with school kids. These partnerships may be seen through afterschool programs, presentations to the student body or educational field trips. Such program implementation is a positive outreach connection to the community. These programs would allow for connections to younger children as well as a large portion of the Buffalo Public school system by demonstrating full integration of basic building blocks which provide sustainable growth.

Two core programming principles to integrate into Buffalo Fresh programming include “Embrace Sustainability” and “Implement Smart Growth”. Both of these fundamental principles integrate well into daily practices. In terms of programming, Buffalo Fresh will need to build upon assets and positive outreach by noting available resources. Buffalo Fresh can properly maintain a successful program. One example of a positive resource program would be a garden within Buffalo Fresh. While a garden will be a vital tool for education and producing healthy foods, it will not fulfill all produce needs. In order to be sustainable, the community must be involved, likely through a partnership. By utilizing food goods from a partnership with public schools or donations at local churches, programming needs become filled through positive outreach and highlight the most readily available avenues for building connections.

The idea of “building upon assets” is vital to the programming of Buffalo Fresh in order for a strong connection to be built between both neighborhoods. In studying the potential programs, there are two main assets already in existence. Within the Fruit Belt the opportunity exists to build upon churches and the religious community. There are six churches that lie within the neighborhood and many within close proximity. Churches are strong communal spaces that allow for a positive partnership with direct access to the community, a second asset available for BNMC. Provided

that Buffalo Fresh can create a partnership with the occupants of BNMC, resources may be better utilized. One example of a positive partnership would be to host a meal preparation demonstration through one of the churches. In return, BNMC could provide any necessary resources that are not readily available, such as seating, tables or cooking equipment. This example shows how proper programming of resources can build upon strengths through basic sustainable options. Creating long lasting programming and being able to build connections is important in creating a community between BNMC and the Fruit Belt.

One part of programming that is vital to the future growth of Buffalo Fresh is funding. While given the initial startup funds of \$1 million from NYSERDA, it is important to understand the funds will be divided among three focuses. Ideally, this funding would be sufficient, though Buffalo Fresh will need other sources of income. Being a non-profit organization, Buffalo Fresh will have two sources of funding, including basic cash flow. Creating a cash flow can be done through partnerships of various degrees such as utilizing local farmers and fresh food product marketers to have their goods sold at Buffalo Fresh. Giving the sellers access to the space could create a profit share between the two, allowing for one source of revenue to be utilized. Another form of revenue can be found through grants. Buffalo is generally an untapped market for collaborations with other organizations, as they may provide a large contribution or form a vested interest. Two large scale potential partners may be M & T Bank, as well as First Niagara Bank. Both banks are local, as well as heavily influential throughout the Western New York region. The bank's generosity can be seen in partnerships with groups such as the Buffalo Sabres, Canalside and other various organizations throughout Western New York.

A second source of funding comes from an alternative avenue: volunteering and donation opportunities. While volunteer and donation opportunities do not necessarily fulfill all necessities, it allows for the community to get involved with Buffalo Fresh and vice versa. Additionally, this would lend itself to support for numerous areas of programming such as education and marketing, as detailed below.

Volunteering has the potential to be extremely successful, as seen in previous projects throughout Buffalo. Massachusetts Avenue Project (MAP) is a program that has created strong connections within the community. MAP is an organization that is very similar to the potential Buffalo Fresh. MAP has utilized urban farming through partnerships to help promote and create change in the food culture of their community. They have utilized volunteers in day-to-day operations, as well as for programs specific to MAP. Keeping costs for this programming to a minimum, while being able to receive the most for the entire project is a vital component.



A deeper analysis of the aforementioned topics has led to a few key points for future implementation. In order for programming to be successful it is important to explore a variety of funding and planning avenues. Creating diversity within available resources allows for sustainability and future opportunities. Connection is key, as well as implementing strong basic ideas to create a deeply rooted foundation for all programming. In order to keep programming sustainable, funding, marketing, outreach and education must be meticulously and strategically developed.

General education and awareness is of utmost importance to Buffalo Fresh. Awareness, community outreach and education bring the project full circle, offering residents in the Fruit Belt and surrounding neighborhoods of BNMC a way to remain active in the programs available. With the following outreach and awareness programs, the proposal for Buffalo Fresh and BNMC can begin to shape the way Buffalo thinks of food and healthy living.

In addition to digital outreach, the operation of this space by volunteers, chefs or BNMC staff, allows citizens to directly connect with Buffalo Fresh and its employees. One possible outreach program is the tent station, often seen at festivals, fairs and public outdoor gatherings. Utilizing a stationed, staffed tent would allow visitors and pedestrians to interact with employees and volunteers from Buffalo Fresh providing direct knowledge and understanding of its services. Stationed tents are an opportunity for visitors to receive information in both verbal and paper forms while continuously making a connection to the service. Tents at heritage festivals may also be an opportunity to showcase ethnic and culturally appropriate food choices that can be found at Buffalo Fresh.

For example, sampling an authentic German potato salad with organic potatoes grown in Buffalo Fresh's garden at a German heritage festival will allow for people of that heritage to make a connection to healthy food choices while also being culturally appropriate. It is of extreme importance to stress a culturally appropriate food selection as many people have strong ethnic roots and may be unfamiliar with Americanized food traditions. Tents stationed at fairs and festivals allow for a large number of people to be introduced to Buffalo Fresh in ways that are easily accessible.

In addition to community outreach programs, signage is an important part of branding and awareness for any service. Like logos, signs may be posted outdoors in a variety of places, reaching a large number of people. Local volunteers may create signs promoting Buffalo Fresh and listing the benefits and services it offers. Posting signage on strategically placed lawns



or nodal street corners gives Buffalo Fresh a larger outreach area where more people will be inclined to see them. Flyers and pamphlets may be distributed by hand, offering a one-on-one connection, while they may also be posted on public boards in community centers around the city. Positive attention and advocacy is an important part of a successful outreach campaign, giving Buffalo Fresh general awareness within the community.

At the heart of the outreach campaign for the Buffalo Fresh sits the opportunity of local entrepreneurs and small businesses. Buffalo Fresh should be designed to serve people on an individual level while catering to the local businesses and their needs.

Local small businesses have the potential to skyrocket the success of Buffalo Fresh, making it the go-to place to be self-sufficient. In addition, small businesses may attract a following, ultimately leading back to Buffalo Fresh. With the right tools and programs in place, small businesses may utilize the potential services offered by Buffalo Fresh to boost the local economy and keep the surrounding neighborhoods healthy and active.

Specific to the City of Buffalo there are a number of food-centric activities that attract people interested in healthy and resourceful food options. For example, the Lexington Co-op hosts canning classes in a commercial kitchen within the city. Buffalo Fresh may be an additional location for the classes, incorporating the residents of the Fruit Belt and the neighborhoods surrounding BNMC. This is vital to the success and development of the neighborhoods as the people nearest to Buffalo Fresh are those who have the potential to utilize it most. Gearing such classes towards those residents can unite them with BNMC making it more successful. The canning classes offered by the Co-op may be in need of additional resources not provided by other venues. Like the Co-op, small businesses may need a volunteer base, distribution contacts, a donation site list and more. Making Buffalo Fresh a center for additional resources increases awareness and the level of outreach, ultimately benefiting the local economy.

Services that many small businesses need may not be readily available specific to their particular trade. Buffalo Fresh has the potential to center its resources on businesses that promote healthy food and active living, giving them greater rates of success. Knowing that the surrounding neighborhoods of BNMC have a high percentage of Hispanic and African American residents, there are a number of ways for an entrepreneur to promote a culturally appropriate food product. Providing the entrepreneur with specialized resources such as financial counseling, volunteer networks and legal support may assist the small business in getting started. Such support networks may not require a full time staff, though they may be available upon request. Programs



to help food-centric small businesses get started will show local residents that BNMC has more opportunity to reach everyone involved.

In addition to the small business services related directly to growth and opportunity, the connection to BNMC is of great importance. Tying in Buffalo Fresh and its users directly to the Medical Campus will ensure a positive outlook and growth opportunity. Users, employees and crew involved in the day-to-day operations of the Medical Campus will need access to food and healthy dietary options throughout the day. As food is a staple of our health, ultimately shaping our potential use of the Medical Campus, it is important to encourage healthy living and eating. By providing full meals and a range of meal programs available to workers, Buffalo Fresh becomes a center of use and activity while implementing and promoting a healthy diet and active life.

All users and workers of the community may be provided with the opportunity to purchase meals throughout the day on a trailing reloadable card, allowing them to utilize the services that are most convenient to their respective activities. This type of program would help to fund Buffalo Fresh while creating a stable, reliable way to access fresh foods.

Further programming involved in Buffalo Fresh may be centered on the surrounding community involvement and participation. A community garden located on the parcel is an interactive way to incorporate the community and involve others in the overall success and education of Buffalo Fresh. Community gardens offer a variety of ways to grow community development while strengthening the core of Buffalo Fresh as a whole. A community garden provides a chance for positive outreach in the area by incorporating the surrounding neighborhoods into the planning and cultivation. The Fruit Belt region surrounding BNMC offers a variety of resources such as human power and close proximity to the garden. To fully implement the plan, garden leaders may be chosen from each street within the Fruit Belt to offer suggestions and maintain the space. Including a leader from every street within the Fruit Belt offers a greater variety of suggestions, while creating a cohesive, involved atmosphere. Leaders may have responsibilities involving planting, weeding, watering, harvesting and maintaining the garden, illustrating a sense of pride and accomplishment. Such qualities are important to consider when incorporating the surrounding areas of BNMC in order to help combat any hesitation related to the development.

Looking deeper into the positive outreach that comes from the community garden, it is important to note the positive outcome for Buffalo Fresh itself. Buffalo Fresh will benefit from the garden as it uses fresh fruits and vegetables in the meal preparation for visitors. Maintaining an



organic garden will also help attract patrons with a sense of environmental awareness as many people choose to eat and purchase foods within a particular radius. The community garden has the potential to be a focal point on the parcel, while also being a source of fresh foods for everyday use. Incorporating the garden into the philosophy of Buffalo Fresh is also important. The community garden has the potential to emphasize the core values of Buffalo Fresh, engaging patrons and visitors in the larger concept of healthy eating. The garden may also be a center for education as school field trips can be planned and after school programs can visit the space to help kids understand the importance of healthy eating and active living. By providing the surrounding community with an educational yet functional destination, the overall concept of Buffalo Fresh comes full circle. The opportunity to help the surrounding neighborhoods understand the benefits of eating healthy while physically growing the produce to do so is a vital component to the success of the outreach programs and of Buffalo Fresh as a whole.

Growing the food in the community garden is a great way to reach local communities and involve the residents in the day-to-day operations of Buffalo Fresh. In addition to the growth and cultivation, there are other outreach opportunities associated with a community garden that occur after the food has been harvested. There are a number of waste management programs which can be directly related to Buffalo Fresh and the community garden in order to maintain a positive relationship to the surrounding communities. Compost piles, while growing in popularity, are an underutilized way to focus on community interaction and incorporation. The proposed community garden will need leaders and volunteers to maintain and grow the produce, as well as to clean up and reuse. While Buffalo Fresh becomes a center for food preparation using produce and other natural foods, there is likely to be a large amount of organic waste. Providing a compost bin in the back of the parcel has the potential to efficiently use the waste material that comes from food preparation while providing additional outreach opportunities for the Fruit Belt and surrounding neighborhoods of BNMC.

Similar to the garden leaders, there may be compost and recycling leaders which oversee the churning, maintenance and overall cleanliness of Buffalo Fresh. By providing additional programs to stimulate interest and acceptance of Buffalo Fresh, the surrounding communities may feel more involved and connected to the space. Community education may also be centered on the compost bin, informing children and adults of the benefits of compost bins and how they help the environment as well as future garden projects. By planning a cohesive involvement centered on all aspects of the community garden, residents of the nearby neighborhoods create a sense of community and connection in regards to the projects they work on. Ultimately, this creates a sense of community within and around BNMC.

Similar to the community garden, the compost bin and recycling centers within Buffalo Fresh offers a fully encompassing plan set within the fundamental values of BNMC Green Commons. The compost bin may be used to fertilize the community garden or other outdoor areas on the parcel, showing adults and children that their efforts are physically applied. Additionally, the compost bin and recycling center may be used to keep areas of BNMC clean and tidy. For example, knowing that a compost bin is nearby, a child might choose to throw a banana peel in the bin rather than in the trash. Likewise, recycling centers may have the same impact on Buffalo Fresh where paper products can be taken and recycled rather than thrown into the trash. Utilizing the compost and recycling centers as a point of reinforcement and physical application has the potential to make Buffalo Fresh a more successful place in and around the surrounding communities.

The concept of Buffalo Fresh has a number of benefits and resources available to the employees and end users of BNMC. Effective programming and community involvement is one of the most important aspects in creating a successful center, particularly in Buffalo Fresh. By providing a number of outreach programs to incorporate interaction between BNMC, the Fruit Belt and the surrounding neighborhoods, Buffalo Fresh has the potential to serve a number of people in a wide array of ways. Using community outreach programs in direct relation to educational opportunities, small businesses and individuals will find Buffalo Fresh can truly be a successful center of BNMC encompassing the values and fundamentals that surround a healthy eating and active living campaign.

Directly related to the outreach and marketing success of Buffalo Fresh, education is of great importance. Education about Buffalo Fresh itself, as well as education on what healthy food has to offer is vital to the positive change that BNMC plans to make. As education in the City of Buffalo continues to be a source of debate for parents and teachers, there are a number of outlets available to assist children in maintaining a well-rounded education. The use of Buffalo Fresh is an excellent way for students of all ages to participate and engage in learning how to live and maintain a healthy, active lifestyle. Likewise, adult education on the topic is of utmost importance. There are a number of possibilities to utilize Buffalo Fresh to educate adults of various backgrounds and lifestyles on how to grow, prepare, and recycle all aspects of a healthy food system.

Many people living within the boundaries of the City of Buffalo have limited or restricted access to food. Therefore, it is reasonable to understand that their extended knowledge of the subject is



ill advised or minimally expanded beyond the basics. Taking into consideration the Buffalo Public School system, there is ample opportunity to address a lack of education surrounding the issue of healthy eating. One way to fully incorporate the educational aspect of Buffalo Fresh is to host site visit days for the schools in the area. There are many schools within the city, offering daycare trips, elementary trips, high school trips and vocational school trips to see the space and ask pertinent questions. Many of the school field trips can be centered on the education of healthy living, while offering the students an opportunity to become engaged. While students are on site, they may take turns in harvesting a particular crop or observe the preparation of a fresh food meal. This will allow students to learn in a hands-on approach as opposed to reading about food systems. While students are visiting the site, they will have first-hand experience focusing on the education behind the crops, learning what different fruits and vegetables mean for our bodies. Allowing students on a field trip to physically engage in the learning process may peak interests in gardening or farming as they begin to see what is possible.

Similar to field trips, educational programming centered around Buffalo Fresh may take shape in different ways to reach students of the public schools. The employees or volunteers of Buffalo Fresh may visit schools and give presentations on why healthy eating and active living is a vital component to keeping our bodies in good condition. Presenting to schools in the form of traditional assemblies is a great way to pass along factual information. In some cases it may be equally as effective to provide a sampling of food to students (within reason and respect to allergic concerns) illustrating firsthand how great tasting fresh food can be. Many young children and adolescents have a negative view of fruits and vegetables due to unfamiliarity, taste, color or previous experiences. By giving the students actual food to consume, Buffalo Fresh is directly educating them on the benefits of fresh food both in taste and in health.

Furthering the relationship of Buffalo Fresh to the public school system, there are opportunities for future growth and connection. Many of the public schools provide breakfast and lunch for students as a courtesy and to keep them well-fed. By utilizing this opportunity, Buffalo Fresh can supply some of the produce used in these meals to help reinforce the idea of eating local and healthy. Education on the topic is deeply rooted in the perception of food, which is often how students can begin to understand the benefits. By offering food from the community garden, students may better realize the possibilities of eating healthy and living an active life.

Directly related to the Buffalo Public School systems, there may be an opportunity for after school education programs to be centered on Buffalo Fresh. In many cases there are after school programs to keep kids occupied during the hours when parents may be at work. These programs



are not limited in age, grade level or location, allowing for a wide range of participants. By utilizing these after school programs at Buffalo Fresh, students may visit a safe place with adult supervision in order to take advantage of the educational resources available within the city. After school program visits may be centered around gardening, learning to compost, classes on meal preparation and more. By giving after school programs a place to visit, students may feel more engaged as they are not “forced” to participate during the school day. This allows students to take advantage of the resources available to them.

In addition to elementary schools, there are a number of high school level options available to utilize on a daily basis. High schools in the area, such as City Honors, may take advantage of an internship program to partner with Buffalo Fresh. Internship partnerships across the United States aim to help older high school students get involved in areas that they may build a career upon.

In some cases internships involve teaching, business or careers within the medical field; all of which apply directly and indirectly to Buffalo Fresh. Allowing students from local area high schools the opportunity to participate in daily activities may allow them to gain a greater understanding for culinary arts, health and medical applications or even farming. Potential internship programming may be fulfilled with Buffalo Fresh in the form of volunteer work. Students may have duties revolving around cultivating the community garden, preparing meals with proper training and supervision, logistics analysis in coordinating deliveries and even public relations in planning future Buffalo Fresh events. Many of these opportunities are educational while allowing students to apply themselves in a realistic manner. While internships are ultimately geared towards helping students find a career path, they can benefit Buffalo Fresh at the same time. Internship programs may fulfill volunteer needs for Buffalo Fresh, ensuring a steady and reliable source of help in a number of areas. Additionally, Buffalo Fresh has the potential to benefit through the intern’s suggestions and ideas, as they may have insight as to what needs to be done to reach those under the age of 18. Mentoring within an internship is an important role in educational programming as it ensures proper utilization of assets and long lasting connections to Buffalo Fresh. With the internship and mentoring programs in place, Buffalo Fresh can become an educational resource for older students while utilizing their abilities to function in a more efficient way.

It is important to not only take students into consideration when educating the public on healthy eating, but also the adults in the surrounding area. Knowing that the Fruit Belt is in direct relation to BNMC there are a number of educational opportunities available. Involving both parents and students on educational opportunities is one of the most effective ways to promote healthy



eating and active living from within. Students may learn in school but they may not have the ability to apply the ideas at home. By integrating parent-child education, there is more initiative to repeat the healthy activities within an individual setting.

One of the most important ways to involve parents and children in the educational process is through direct interaction. Hosting cooking classes where children can be a parent's "helper" in the kitchen is vital to illustrating a healthy lifestyle. By teaching parents to cook healthy meals using local foods, it instills a feeling of accomplishment in the adults as they begin to provide a healthy meal option for their families. It is equally important for a child to get involved in the meal preparation with his or her parents for a number of reasons.

Children may bond over the process, by getting involved in an activity they can enjoy with their parents. Additionally, it is an early form of instilling values in children as they often times learn by watching as opposed to listening. By getting the children involved in the kitchen, they are fully encompassed in the idea of healthy eating and living.

Parent-child educational classes may have a number of focuses and are not limited to food preparation. A parent-child gardening class may be a topic to center around the community garden. By hosting a class on growing food, both parents and children leave with an option for healthy activities at home. Not only is gardening a form of light exercise, ultimately leading to a healthier lifestyle, but the benefits are endless. Some of the educational and informational classes may focus on growing various fruits, while others may center on different vegetables that are easily grown in Buffalo's climate. Promoting gardening and cultivating classes has a number of benefits that both parents and children may take home.

In relation to gardening and meal preparation classes, both parents and children may become engaged in more broad topics such as recycling, nutrition and fitness. The open lawns next to BNMC Green Commons may serve as outdoor education sites for parents and students to learn together. Buffalo Fresh is a center for activity and education with unlimited applications. By hosting classes on recycling, parents and students may begin to have more eco-friendly daily practices, potentially creating a small scale compost bin at home. Classes on nutrition and fitness may begin to teach parents and children the importance of maintaining a healthy lifestyle, educating both groups on making better choices throughout the day. Informing people of the other necessities to maintain a well-rounded healthy life, such as exercise and fitness, is a vital component to choosing healthy food options. When parents are able to keep their kids healthy through various levels of activity and exercise throughout the day, food choices ultimately



become easier. Through promoting fitness and health on all levels, it is not unreasonable to see potential decreases in childhood obesity and diabetes. Buffalo Fresh, conveniently located in the heart of the Medical Campus, has the opportunity to educate parents and children on a number of health-related aspects.

In educating both parents and children on the benefits of a healthy lifestyle it is equally important to educate adults on food and health issues that may affect them in different ways. Adults have fewer opportunities to gain education and awareness on the topic as they are not enrolled in school on a daily basis and often have the responsibility of providing food for themselves or their families.

Therefore, it is of utmost importance to target adult-only classes as sources of education. Adults often have more to think about when preparing a healthy meal than the food itself. There is concern over acquiring food, food costs, preparation costs and food waste. By offering adult-only classes to combat some of these valid insecurities, people may feel more open about preparing a healthy meal.

Educational classes for adults may reach beyond the basics of food and meal preparation but may expand into the other important areas of healthy living. Hosting financial seminars at Buffalo Fresh may help some adults to make more appropriate financial choices when it comes to purchasing food. It is well known that a day's worth of calories may be purchased at a gas station for only a few dollars, but showing adults the benefits of spending more money on healthier food may be more gratifying. Adult classes may also focus on transportation. Hosting a seminar on car sharing, mobile markets, traveling farmers markets and other various forms of acquiring food may help them plan for a healthy lifestyle. Some adults may have concerns over fresh produce and food waste, so offering a seminar on recycling, replanting and regenerating food may help to eradicate fear of the unknown. By hosting adult only classes there is a greater opportunity to speak to other areas of an adult's life. Though adults and children both consume food, there is a large disconnect between them on understanding how to acquire and prepare the food on a large scale.

C. Marketing

One of the most successful ways for the Fruit Belt and surrounding neighborhoods to access information provided by Buffalo Fresh is through branding. Logos (Figure 4.1), slogans and other forms of “at-a-glance” advertising allow people to quickly and easily associate with Buffalo Fresh. A logo designed specifically to encompass the values and ideas put forth by Buffalo Fresh may be displayed on literature, commercial vehicles, signage, tee-shirts and name tags worn by employees of BNMC. Reinforcement of a brand allows people to become familiar with a service, giving them reason to explore what it may offer.

In creating a successful logo, Buffalo Fresh and BNMC must consider the audience and the focus. Maintaining a relationship with the City of Buffalo is important, while also relating the design back to food and healthy living. In the “Buffalo Fresh” logo, the word “fresh” reinforces the idea of healthy food and a healthy life, while the colors are attractive and bold. The overall design of the logo speaks to the history of the city, emphasizing the style of Frank Lloyd Wright's architectural elements. Logos offer people a sense of connectivity to a particular service or good, ultimately providing Buffalo Fresh and BNMC with attracted users.

Utilizing logos and slogans to enhance the attraction to a service is extremely vital in a successful operation. It goes without saying that logos may be used on social media sites, allowing for different groups of people to be actively engaged in what Buffalo Fresh has to offer. By all common understanding, social media in its various forms is one of the most successful outlets for people of all ages, walks of life and interests. When discussing the use of social media in relation to Buffalo Fresh, there are a number of ways in which to maximize potential. In recent trends, users of Instagram will often take photos of food and post it for their friends and followers to see. “Instagramming” a photo of a healthy lunch option may encourage people to visit Buffalo Fresh directly or utilize its services. Like Instagram, Twitter is a fast, easy way to get the word out on a particular situation. If visitors of Buffalo Fresh use a particular hashtag, they may spread the word on what is available at Buffalo Fresh. For example, using the potential hashtag #veggiewrap may encourage followers to visit Buffalo Fresh, attracting attention and promoting a level of outreach. Facebook is a third popular social media site allowing official businesses and groups to promote awareness, create events and maximize efforts to maintain an important following. Utilizing social media may ultimately attract interest to Buffalo Fresh, creating a successful center to BNMC.

Buffalo Fresh may take educational programming to the next level by using marketing resources such as signage, packaging and social media to inform the general public of the benefits

Figure 4.1: Buffalo Fresh Logo



associated with healthy eating habits and a healthy lifestyle. Knowing BNMC Green Commons has a large lawn there may be an opportunity to post educational and interactive signage. By offering simple, easy to read and understandable facts in a direct manner it may help to educate the public on healthy living. For example, posting an important fact such as “The carotene found in carrots helps promote strong eyesight” may encourage patrons and visitors of BNMC to eat more carrots. Ultimately, these encouraging facts have the potential to help people in the Fruit Belt and the surrounding neighborhoods to make healthier choices in regards to diet and food. Signage may also play an important role in educating the public in an interactive way. While Buffalo Fresh has the potential to host children and class field trips, incorporating interactive game-like signage will allow children and adults to learn about food in an engaging way. Signs with Q&A tags, colorful images and guessing games will allow students and adults to learn basic facts while spending time at Buffalo Fresh. These have the potential to encourage more visitors while educating the public on an individual level. Other ways to promote education through signage may be on busses, bumper stickers, banners and flyers.

By attracting people on social media, Buffalo Fresh may use those resources to promote education and to reach the largest number of people. Posting bullet points and other factual information on a daily basis to various social media sites will inform any followers about how to maintain a healthy lifestyle. Additionally, Buffalo Fresh may use social media to inform followers of farmers' markets, community garden harvesting or other ways in which people can acquire fresh foods within a reasonable distance. Social media in its different forms has the opportunity to reach the most number of people with little cost to Buffalo Fresh or the community.

Education on the topics of healthy eating, active living, food choices, meal preparation and community integration are all fundamental to the success of Buffalo Fresh. While it is located within BNMC, there is a wide array of opportunities on which to educate people in order to promote a healthy lifestyle. By educating the general public and those within the surrounding communities, there is a greater chance of success for Buffalo Fresh along with an increased awareness of health on multiple levels. Through education, people of all ages and backgrounds can become aware of important resources ultimately assisting them in living fuller, longer lives (Figure 4.2).

Figure 4.2: Residents enjoying Buffalo Fresh

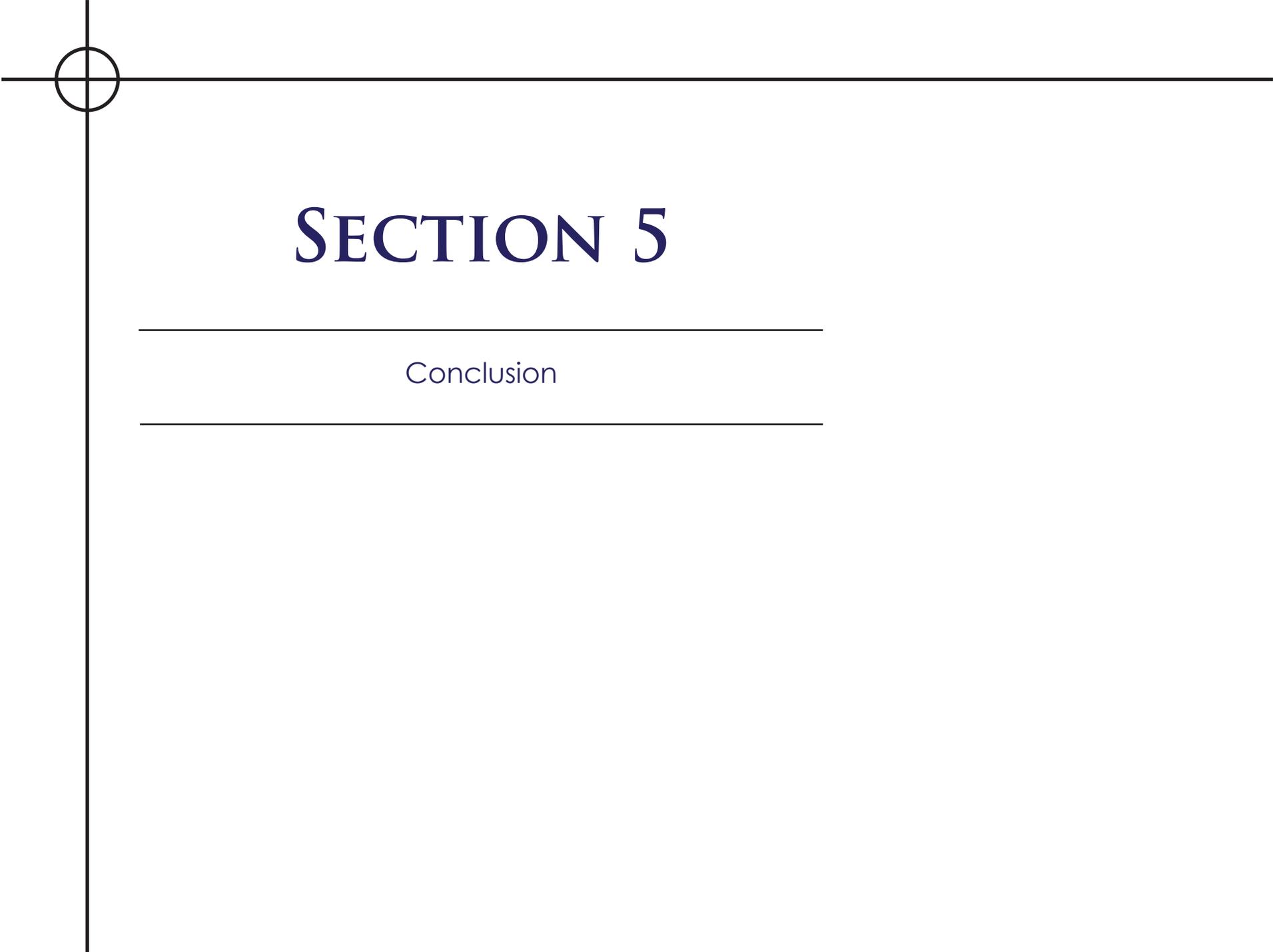


D. 5-Year Plan

Programming, as a general concept, is an important part of any successful integration plan. The appropriate programming for BNMC and Buffalo Fresh has the potential to fully encompass all surrounding neighborhoods of BNMC, including the Fruit Belt. Suitable funding, marketing, outreach and an educational series will ultimately benefit Buffalo Fresh while creating an important center for BNMC. With vital agendas in place, Buffalo Fresh has the potential to reach the community in a number of ways, positively affecting the future of Buffalo. Buffalo Fresh has the ability to change the dynamic of the city, while assisting in the progressive change in the lives of the residents (Figure 4.3).

Figure 4.3: Programming Infographic





SECTION 5

Conclusion

The local food system of the Fruit Belt and neighboring BNMC shows a glaring lack of access to healthy and fresh food. Despite being essential to a healthy lifestyle, fresh foods are often not an option for area residents. Among other factors, local food programs do not always ensure that participants will take advantage of fresh and healthy foods. Furthermore, some programs are not universally accepted. As a result, the recipient is forced to travel farther in order to get to eligible stores. Public transit has a huge impact on food security, and the Fruit Belt does have some access to the metro and the bus system in Buffalo. However, the area is extremely car dependent; the paradoxical nature of this dependency is that, as a low-income area, the Fruit Belt has very low car ownership. It should also be noted that walking to a grocery store is often not an option as there are more restaurants and corner stores, with no close supermarket in sight. Additionally, these restaurants and corner stores do not give the residents inexpensive, healthy options. The current food system in this area is not working to provide the citizens with adequate food security.

Despite the BNMC's generous community outreach efforts, there is a long road ahead in building a true link with its neighbors. The surrounding neighborhoods are composed of generally low-income households and very low educational attainment. As a step in the right direction, BNMC has created jobs and programs that cater to their neighbors (Figure 5.1). The two entities are now working as one community, in an effort to grow strong connections for all parties. This is a concept that will continue through the development of Buffalo Fresh at the Green Commons.

Lastly, effective programming is paramount to successful integration and implementation. A strong programming campaign by Buffalo Fresh and the medical campus as a whole has the potential to fully encompass all surrounding neighbors, including the Fruit Belt. Suitable marketing, outreach and educational series will prove to be comprehensively successful for Buffalo Fresh, BNMC, and the city as a whole.

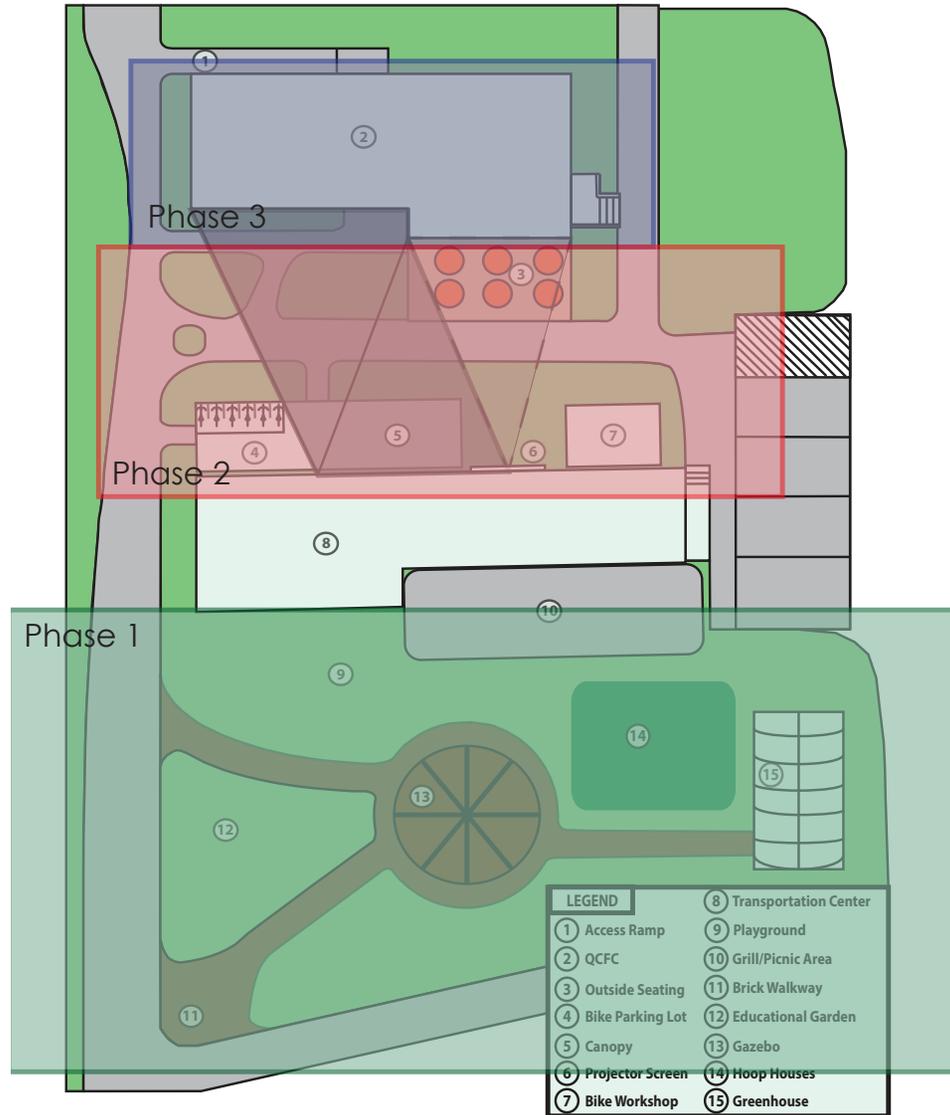
With vital agendas in place, Buffalo Fresh has the potential to vastly improve the local food system; this is a huge step in the right direction for the future of our great city. Buffalo Fresh at the Green Commons has the ability to change the face of healthy living in the City of Buffalo, and promote a better lifestyle for all.

Figure 5.1: Buffalo Fresh spaces being used



BUFFALO FRESH AT THE GREEN COMMONS

Figure 5.2: Suggested Phases for completion of Buffalo Fresh Project





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- 5 Buffalo Niagara Medical Campus, "BNMC," last modified 2014, <http://www.bnmc.org/BNMC/>.
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APPENDIX A

Poster Presentation

BACKGROUND & CONTEXT

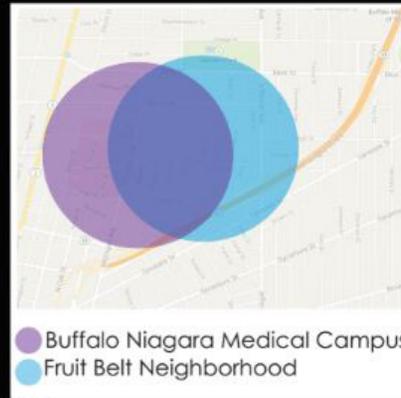


The Buffalo Fresh logo is a combination of the design aesthetics found in the BNMC and throughout Buffalo. The logo features navy and white details consistently illustrated in the medical campus, while the linear details speak to the craftsman style of architecture found in many Buffalo structures.

The Buffalo Niagara Medical Campus site plan depicts structures and buildings within the physical boundaries in relation to streets and pedestrian walkways. Existing condition photos illustrate the area surrounding the site while providing a look into the rest of the medical campus.



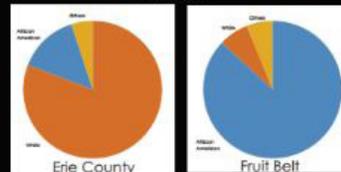
SOCIO-ECONOMIC DEMOGRAPHICS



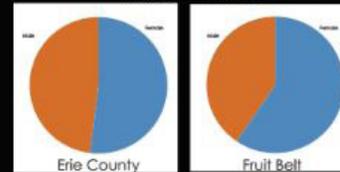
BNMC FOUNDATIONS

BNMC supports regional development beyond campus boundaries, reflecting member groups' total composition and initiatives. The BNMC will engage surrounding neighborhoods to enhance diversity, inclusion, and community revitalization, while creating an environment that will seek cooperative collaborations and community solutions.

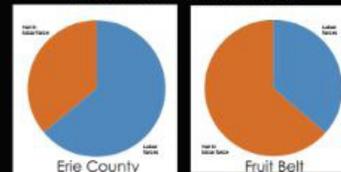
RACE



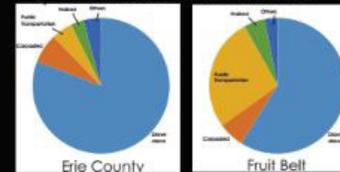
POPULATION



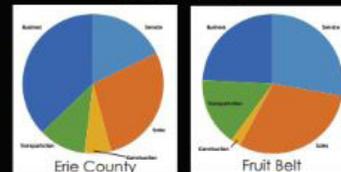
EMPLOYMENT STATUS



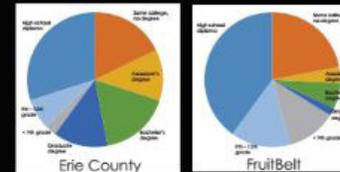
COMMUTING TO WORK



OCCUPATION



EDUCATIONAL ATTAINMENT



EXISTING FOOD RESOURCES

STRENGTHS



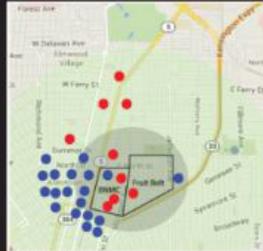
Massachusetts Avenue Project

Gardens often occupy vacant land plots in neighborhoods, that otherwise would see crime. There are eleven parcels in the Fruit Belt neighborhood.

Act as an information center to teach locals about living healthy lifestyles and securing healthy foods

Close proximity and connection to local food producers, such as Massachusetts Avenue Project.

WEAKNESSES



Google Maps

Unhealthy options outweigh fresh options in neighborhood and surrounding area

Limited accessibility to grocery stores

75% of families in the Fruit Belt receive SNAP Benefits

● Fast food
● Restaurant/Cafe

EDUCATIONAL OPPORTUNITIES



Greenhouse Garden

Sense of place and community

Multifunctional space- cafe, cooking kitchen, workshop space

Public outreach- mobile market, print media

MARKETING OPPORTUNITIES



Green Commons

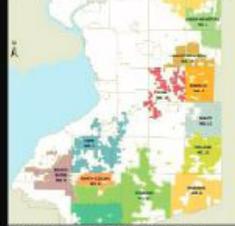
Seasonal foods - festivity brings people together and creates bonds

Delivery services for those unable to transport themselves - food truck, produce drop off

Open year round - combatting the cold weather with new designs and growing strategies

FOOD SECURITY

ERIE COUNTY AGRICULTURAL DISTRICTS

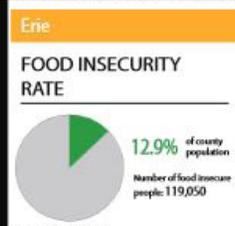


Erie County Department of Environment & Planning

FRESH FOOD

Proximity of agricultural districts and zoning areas in Erie County;
Importance of a balanced diet;
Impact of a healthy life on chronic disease solutions for Buffalo.

ERIE COUNTY FOOD INSECURITY RATE

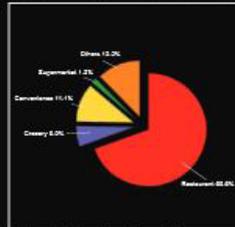


<http://feedingamerica.org>

AFFORDABILITY

Households earning median wage will spend nearly 30% of income on food.
Many households are dependent on at least one federal or community program for food assistance such as SNAP, WIC, NSLP or SFMNP.

DISTRIBUTION OF FOOD DESTINATIONS



<http://foodsystemplanning.up.buffalo.edu/>

ACCESS

Most food retailers in the area are restaurants, and only 7.2% are grocery stores or supermarkets. Most people do not have access to healthy food retailers within walking distance. Due to the limited number of grocery stores, new grocery store construction is essential.

FOCUS AREA SITE MAP



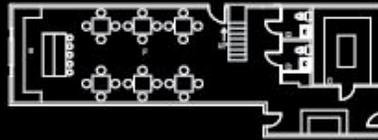
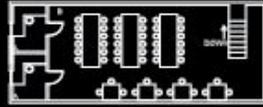
Google Map

TRANSPORTATION

Automobile dependent design;
Access to NFTA metro and bus system;
No grocery stores are within the Fruit Belt neighborhood.
Center for Urban Studies Health Assessment indicated most people drive to obtain groceries.

LAYOUT AND DESIGN

INTERIOR DESIGN FEATURES



- Open floor plan
- Comfortable cafe area
- Educational kitchen that resembling a residential kitchen
- Shared-use commercial grade kitchen
- Convenient entry/exit bay on the south wing
- Fully adaptable conference space throughout the second floor for business affairs
- Use of exposed brick throughout the design maintains the historic fabric



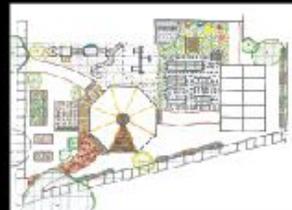
EXTERIOR DESIGN FEATURES



- Covered area joining the building with the transportation hub
- Cafe style seating under covered area adjacent to bicycle parking workshop
- Retractable projection screen on the southern wall for outdoor programming services
- ADA compliant alternate entrance
- Separate entry/exit bay for the shared-use kitchen
- Use of green space throughout



CORNER LOT DESIGN FEATURES



- Radial plan layout
- Community garden space for education and social interaction
- Playground area for children and recreation
- Hot/cold frame hoop houses
- 30-foot diameter gazebo
- 20'x30' shared-use greenhouse
- Brick masonry pathways with permeable grout and grass inlay

KITCHENS & MATERIALS

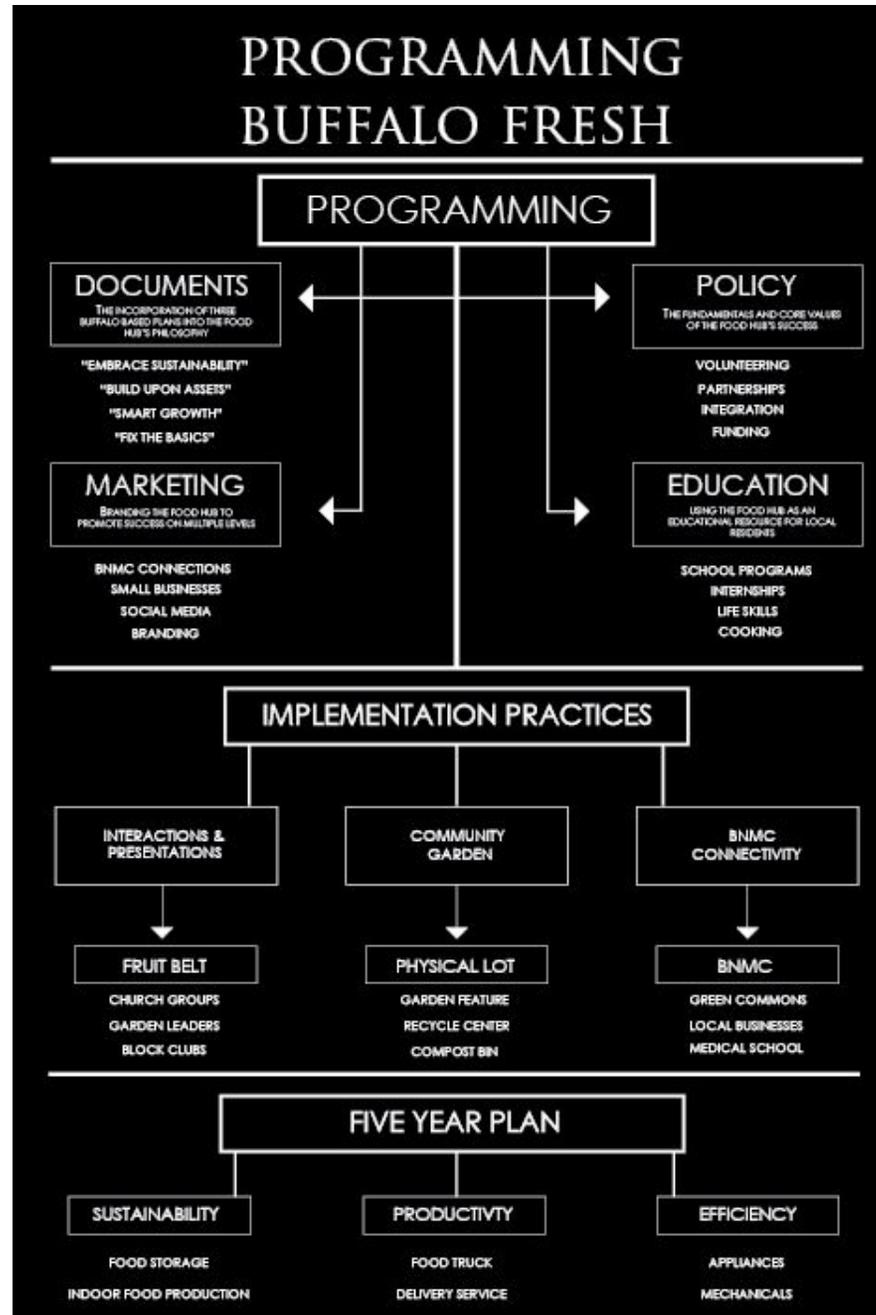


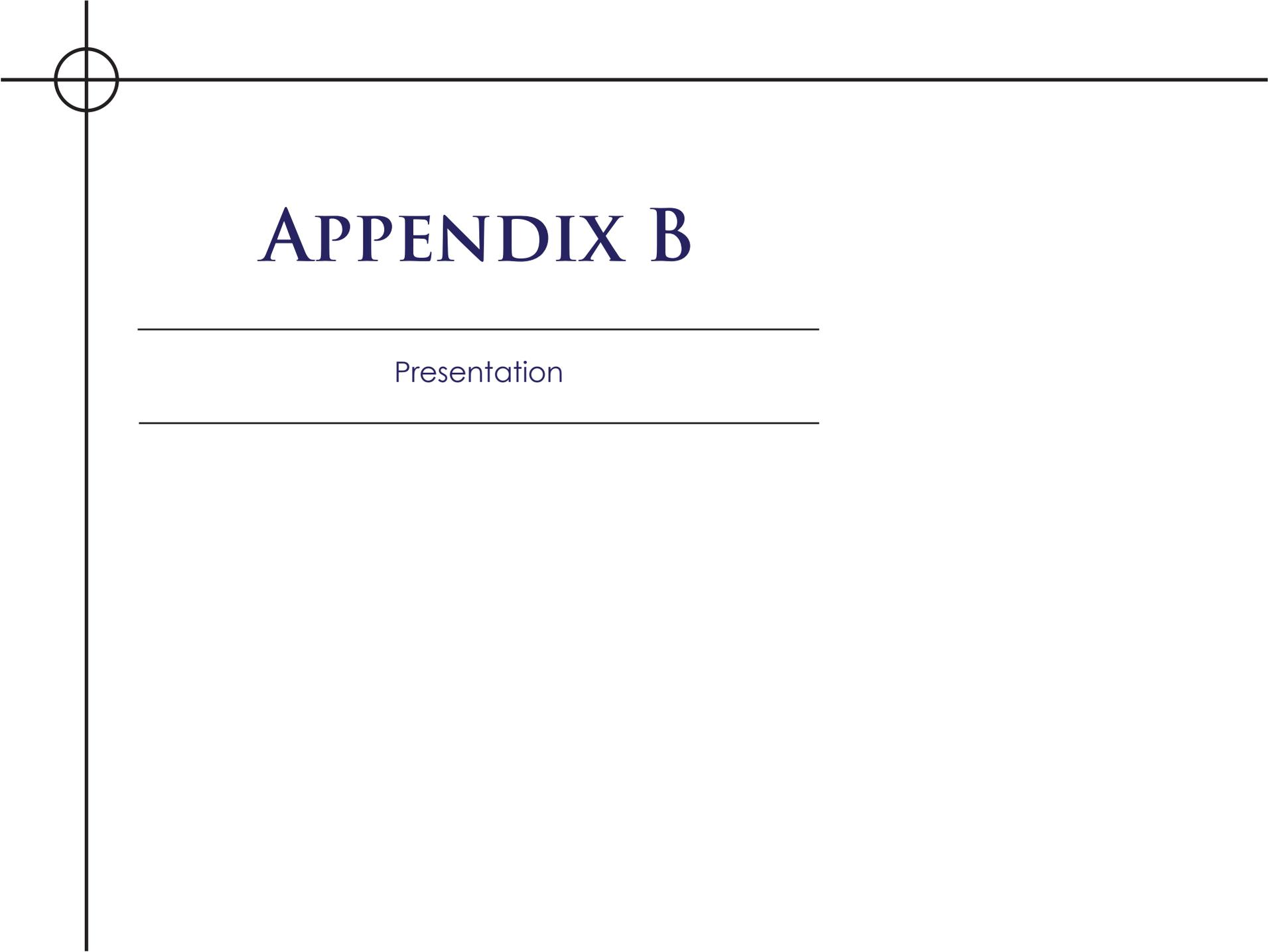
The kitchen rendered below features Kemper cabinetry in Maple wood with a Storm finish. The countertops show Cambria quartz in Waverton along with Daltile Cityview floor tiles.



The kitchen rendered below features Kemper cabinetry in Maple wood with an Oasis finish. The countertops show Cambria quartz in Newport, along with Daltile Emblem floor tiles.

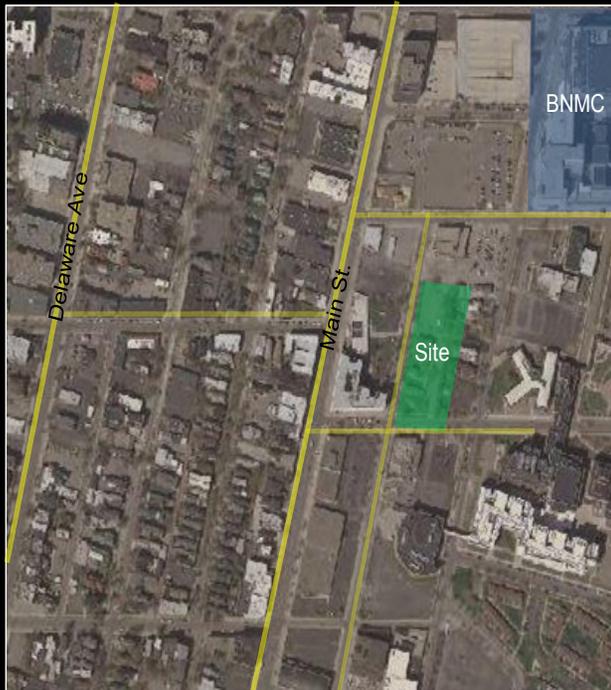






APPENDIX B

Presentation



Erie GIS Online



Buffalo Fresh @ The Green Commons

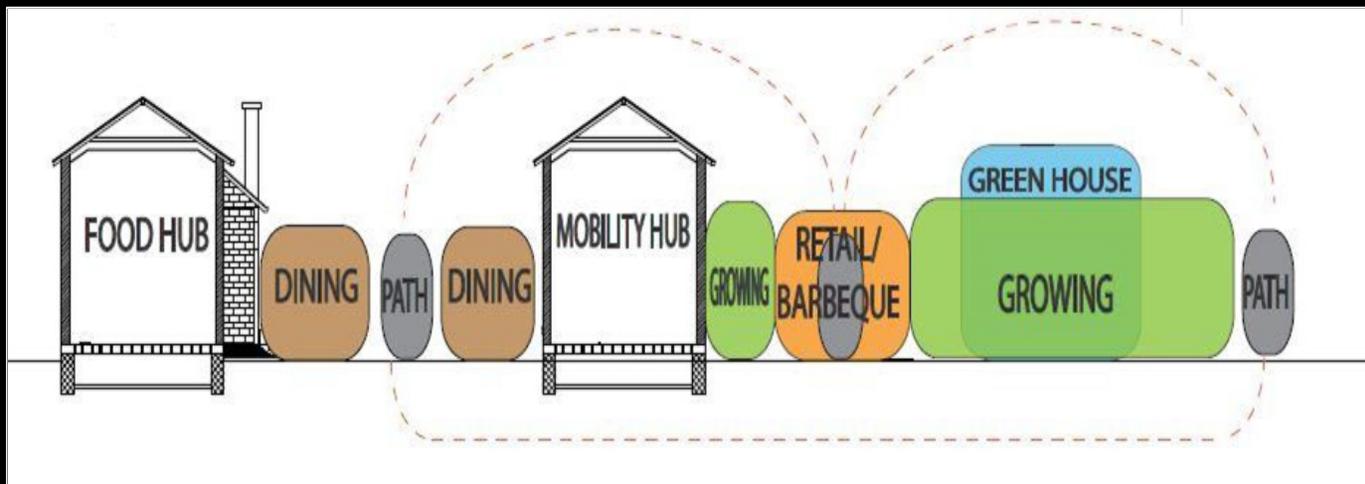


923-927 Washington St



Development And Application

How do we design for food-focused activity?



University at Buffalo, Graduate School of Architecture student studio



Community Food Systems

What are the key principles of a food hub?



Farm Fresh Rhode Island homepage





Considerations

How do we connect the project to the neighborhood?



"With All Due Respect" Blog





Background

Socio-Economic Demographics & Food Infrastructure



Family Income Levels

Income Level	Census Tract 31 Families: 528	Erie County Families: 231,367
Less than \$10,000	157	12,437
\$10,000 to \$14,000	98	6,817
\$15,000 to \$24,999	40	17,085
\$25,000 to \$34,999	45	19,502
\$35,000 to \$49,999	59	29,571
\$50,000 to \$74,999	47	46,049
\$75,000 to \$99,999	27	36,693
\$100,000 to \$149,999	28	39,654
\$150,000 to \$199,999	27	13,048
\$200,000 or more	0	10,511

American Fact Finder



Employment Status

Employee Age Range	Census Tract 31	Erie County
Population 16 years and over	1,680	746,507
16 to 19 years	117	53,080
20 to 24 years	105	68,628
25 to 45 years	596	222,172
45 to 54 years	411	140,653
54 to 64 years	226	116,868
65 to 74 years	70	70,878
75 years and over	155	74,228

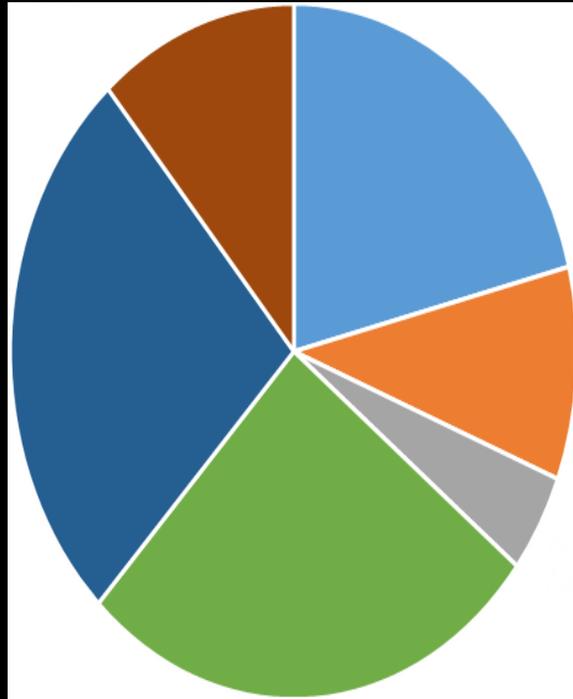
American Fact Finder





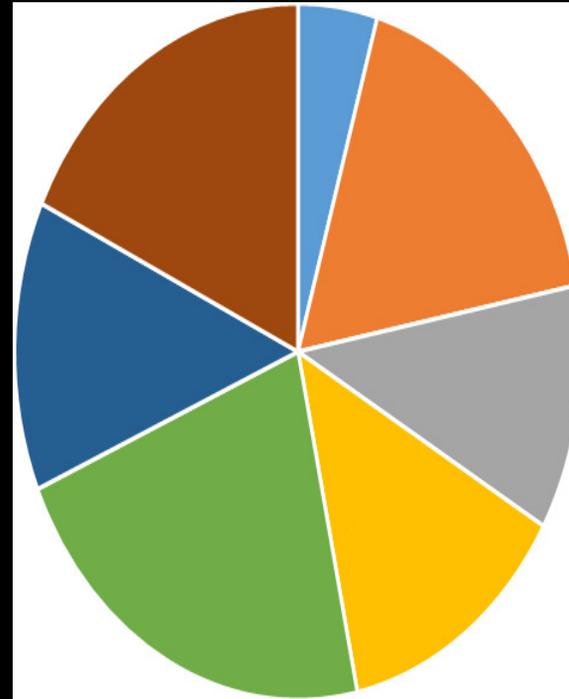
Population Below Poverty Level

Census Tract 31, Population 2,054



American Fact Finder

Erie County, Population 893,110



American Fact Finder

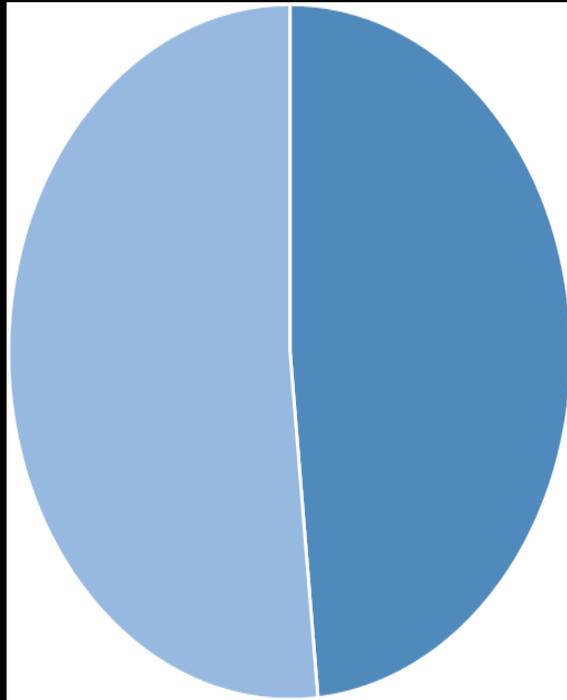
- | | | |
|-------------------|------------------|-----------------|
| Two or more Races | Hispanic/Latino | American Indian |
| Other | Asian | |
| Caucasian | African American | |





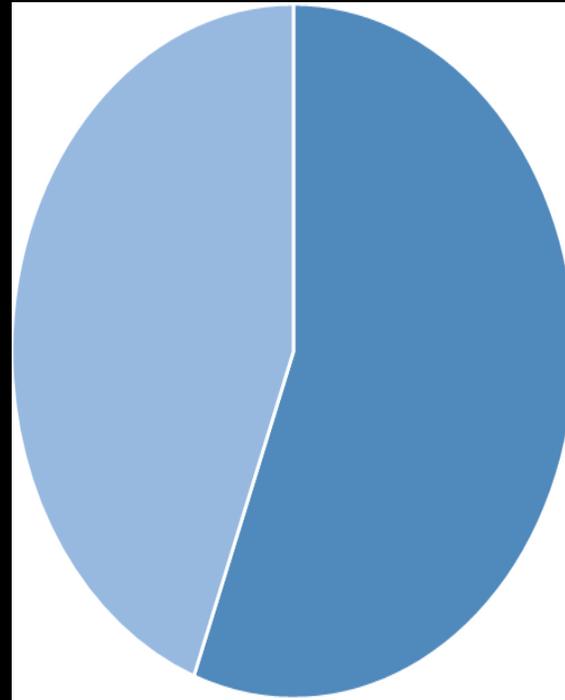
Households Receiving SNAP Benefits

Census Tract 31, Households: 929



American Fact Finder

Erie County, Households: 379,980



American Fact Finder

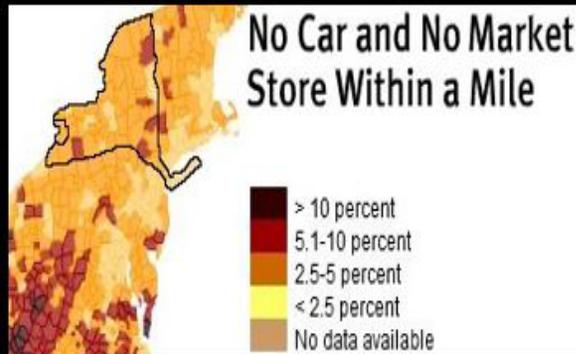
-  Households with 1+ Individual 60-years and over
-  Households with Children under 18-years old





NEIGHBORHOOD CLASSIFICATION

NOT a Food Desert...an **Underserved** Community



USDA, Center for Disease Control



Low income



Low access

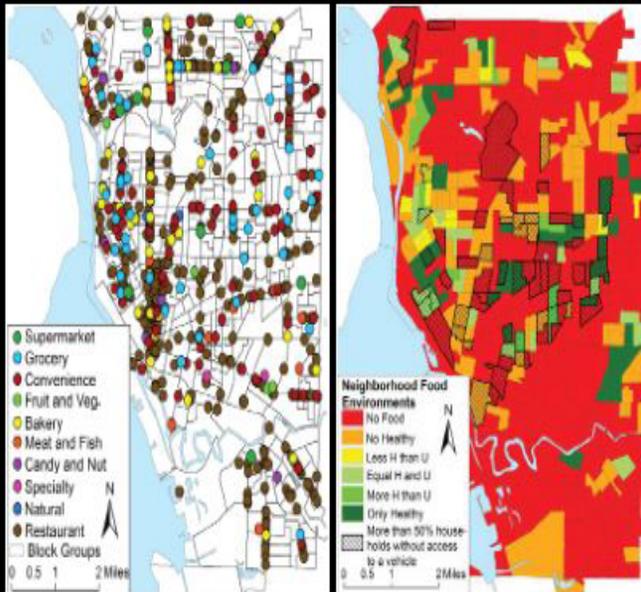


Low vehicle ownership



FOOD SECURITY

Buffalo food retail & walking access



Healthy Kids, Healthy Communities Policy Brief – UB Dept. of Urban Planning

Restaurants

...outnumber supermarkets

Convenience

...outranks health benefits

CITY-WIDE STRENGTHS TO BUILD UPON



<http://mass-ave.org>

Community relationships

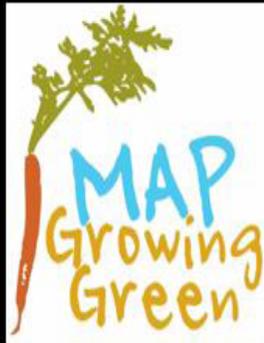
Strong foundations



Yelp! Buffalo

Institutional Aid

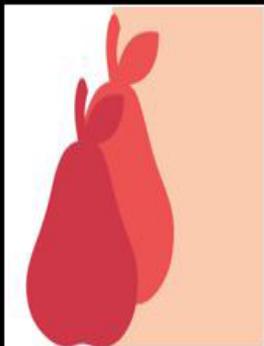
BEST PRACTICES



Massachusetts Avenue Project



Grassroots Gardens Buffalo



Food Policy Council

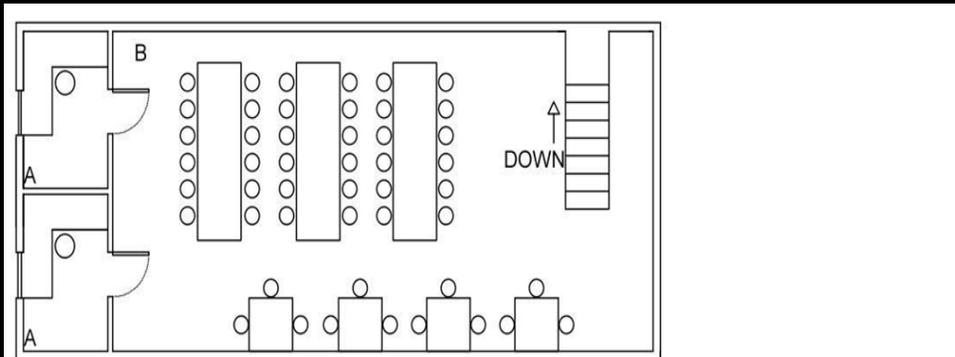




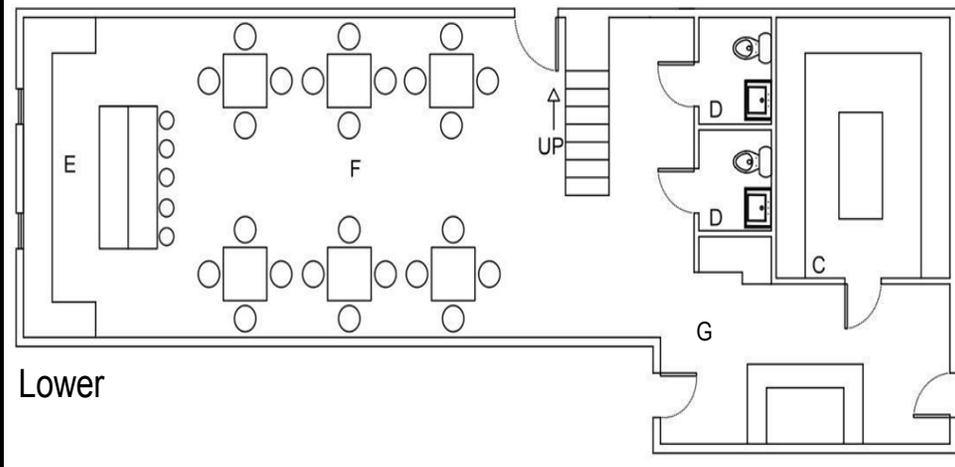
Design & Layout

Food Home Structure & Exterior Lot

Interior Design Buffalo Fresh



Upper

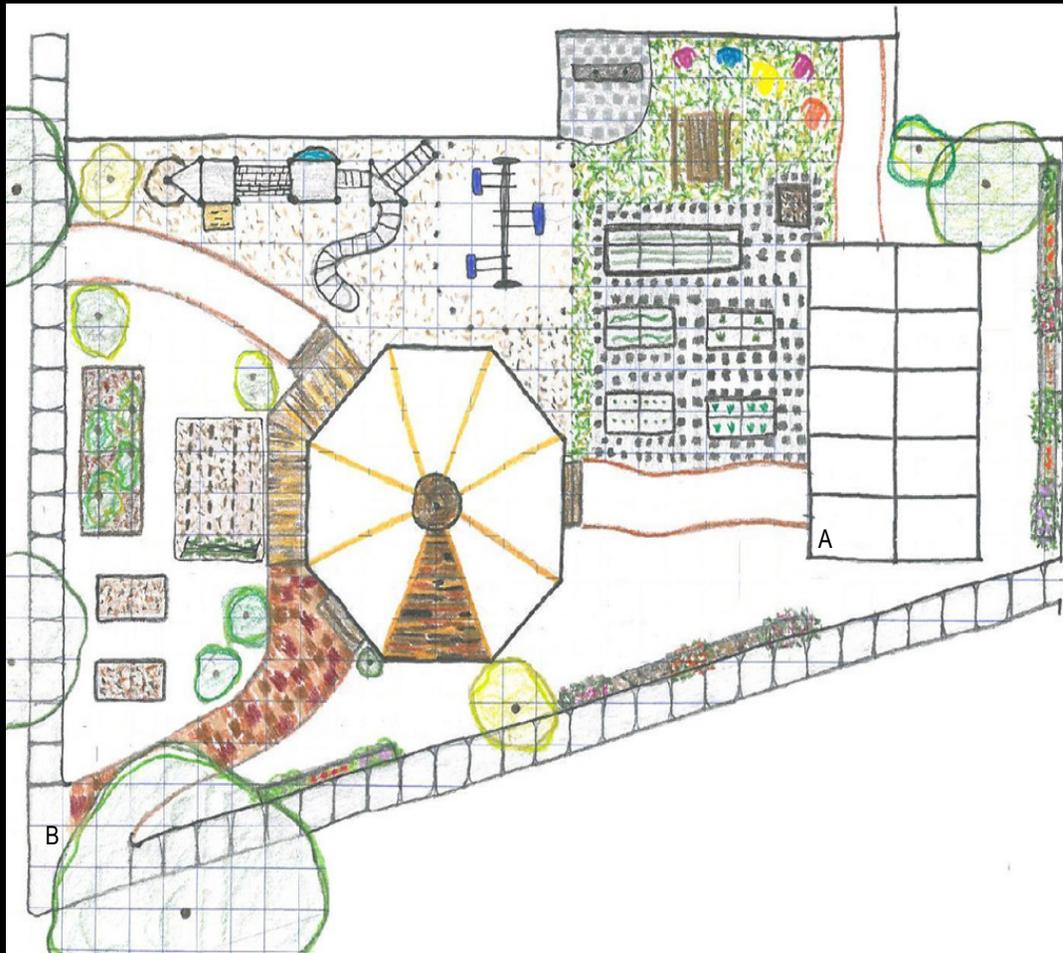


Lower



Exterior Design

Hallmark of the Green Commons





Programming

Implementation Principles & Functional Ethics



Focus Areas

Policy

Marketing

5-Year
Plan

Integration



Policy

The fundamental and core values surrounding the success of Buffalo Fresh.





Integration

Utilization of the existing resources and implementation emphasizing strong connections.





Marketing

Implementing Buffalo Fresh in a way that creates a brand, elevating the success.





5-Year Plan

Building community access to resources and exploring sustainable techniques.





Closure



Weaknesses



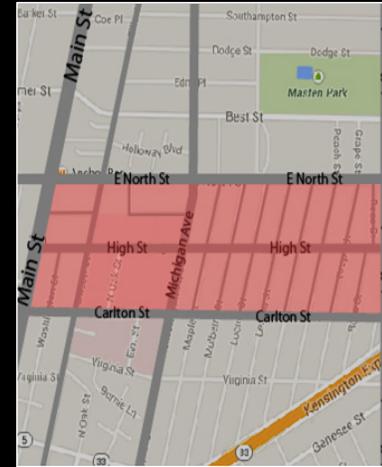
Low income



Low access



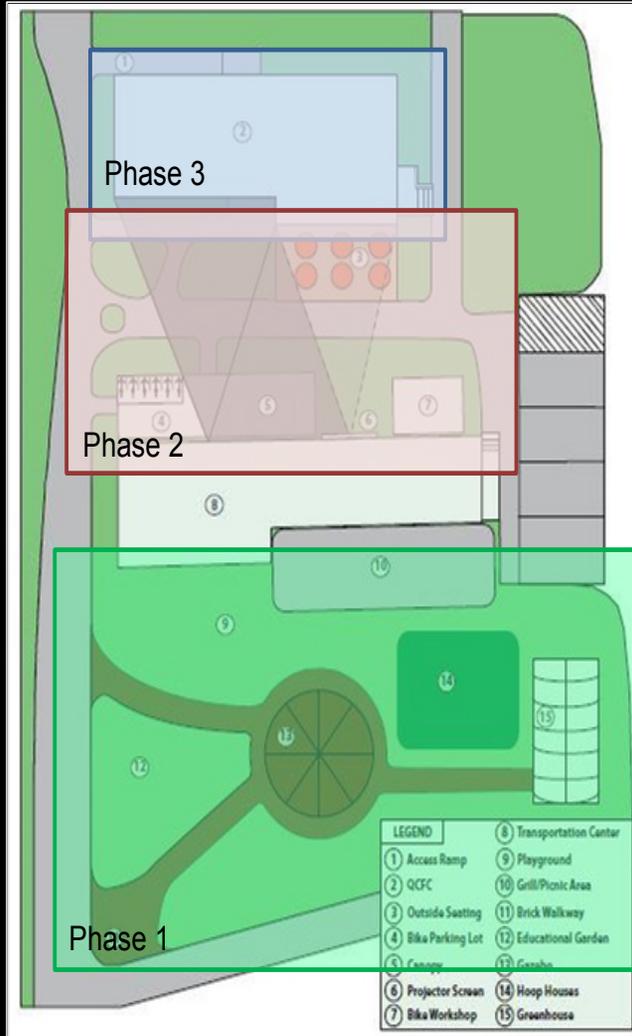
Vehicle dependent design



Transitioning



Design & Plan



Community-centered approach

Sustainable materials and implementation practice





Programming



Buffalo Fresh @ The Green Commons



The Buffalo Niagara Medical Campus supports regional development beyond campus boundaries, reflecting member groups' total composition and initiatives. As a part of the ever-growing medical campus, Buffalo Fresh strives to be a space where healthy fresh foods are an economical and sustainable option. With comprehensive outreach and programming efforts, Buffalo Fresh transcends its physical walls to become the keystone of healthy living in our great city.





APPENDIX C

Census Data

Fruit Belt Population Demographics

SEX AND AGE	Number	Percent
Total Population	3,292	-----
Male	1,396	42.4%
Female	1,896	57.6%

RACE	Number	Percent
Total Population	3,292	-----
One race	3,219	97.8%
Two or more races	73	2.2%
One race	3,219	97.8%
White	232	7.0%
Black or African American	2,874	87.3%
American Indian and Alaska Native	6	0.2%
Asian	107	3.3%
Two or more races	73	2.2%
White and Black or African American	4	0.1%
White and American Indian and Alaska Native	0	0.0%
White and Asian	0	0.0%
Black or African American and American Indian and Alaska Native	56	1.7%

EDUCATIONAL ATTAINMENT	Number	Percent
Population 25 years and over	2,341	-----
Less than 9 th grade	269	11.5%
9 th to 12 th grade, no diploma	331	14.1%
High school graduate (includes equivalency)	938	40.1%
Some college, no degree	523	22.3%
Associate's degree	99	4.2%
Bachelor's degree	136	5.8%
Graduate or professional degree	45	1.9%

Fruit Belt Work Demographics

EMPLOYMENT STATUS	Number	Percent
Population 16 years and over	2,680	-----
In labor force	982	36.6%
Civilian labor force	982	36.6%
Employed	783	29.2%
Unemployed	199	7.4%
Armed Forces	0	0.0%
Not in labor force	1,698	63.4%

OCCUPATION	Number	Percent
Civilian employed population 16 years and over	783	-----
Management, business, science and arts occupations	190	24.3%
Service occupations	218	27.8%
Sales and office occupations	232	29.6%
Natural resources, construction, and maintenance occupations	16	2.0%
Production, transportation, and material moving occupations	127	16.2%

COMMUTING TO WORK	Number	Percent
Workers 16 years and over	745	-----
Car, truck, or van – drove alone	426	57.2%
Car, truck, or van – carpooled	45	6.0%
Public transportation (excluding taxicab)	194	26.0%
Walked	38	5.1%
Other means	10	1.3%
Worked at home	32	4.3%



Erie County Population Demographics

SEX AND AGE	Number	Percent
Total Population	919,040	-----
18 years and over	719,715	75.7%
Male	454,411	47.8%
Female	495,854	52.2%

RACE	Number	Percent
Total Population	919,040	-----
White	735,244	80%
Black or African American	123,931	13.5%
American Indian and Alaska Native	5,908	0.6%
Asian	23,789	2.6%
Native Hawaiian and Other Pacific Islander	219	0.1%
Some Other Race	13,427	1.5%
Hispanic or Latino (of any race)	41,731	4.5%
One Race	902,518	98.2%
Two or more races	12,482	1.3%

EDUCATIONAL ATTAINMENT	Number	Percent
Population 25 years and over	623,669	-----
Less than 9 th grade	20,463	3.3%
9 th to 12 th grade, no diploma	44,319	7.1%
High school graduate (includes equivalency)	185,290	29.7%
Some college, no degree	114,837	18.4%
Associate's degree	71,971	11.5%
Bachelor's degree	105,339	16.9%
Graduate or professional degree	81,450	13.1%



Erie County Work Demographics

EMPLOYMENT STATUS	Number	Percent
Population 16 years and over	746,427	-----
In labor force	475,502	63.7%
Civilian labor force	475,294	63.7%
Employed	427,523	57.3%
Unemployed	47,771	6.4%
Armed Forces	208	0.0%
Not in labor force	270,925	36.3%

OCCUPATION	Number	Percent
Civilian employed population 16 years and over	427,523	-----
Management, business, science and arts occupations	158,293	37.0%
Service occupations	75,657	17.7%
Sales and office occupations	119,483	27.9%
Natural resources, construction, and maintenance occupations	25,940	6.1%
Production, transportation, and material moving occupations	48,150	11.3%

COMMUTING TO WORK	Number	Percent
Workers 16 years and over	418,256	-----
Car, truck, or van – drove alone	340,891	81.5%
Car, truck, or van – carpoled	30,351	7.3%
Public transportation (excluding taxicab)	18,718	4.5%
Walked	12,156	2.9%
Other means	6,463	1.5%
Worked at home	9,677	2.3%

Fruit Belt Income Demographics

INCOME AND BENEFITS (INFLATION-ADJUSTED DOLLARS)	Number	Percent
Total households	1,438	-----
Less than \$10,000	387	26.9%
\$10,000 to \$14,999	151	10.5%
\$15,000 to \$24,999	249	17.3%
\$25,000 to \$34,999	257	17.9%
\$35,000 to \$49,999	158	11.0%
\$50,000 to \$74,999	171	11.9%
\$75,000 to \$99,999	34	2.4%
\$100,000 to \$149,999	21	1.5%
\$150,000 to \$199,999	10	0.7%
\$200,000 or more	0	0.0%
Median household income (dollars)	\$22,536	-----
Mean household income (dollars)	\$28,364	-----

Erie County Income Demographics

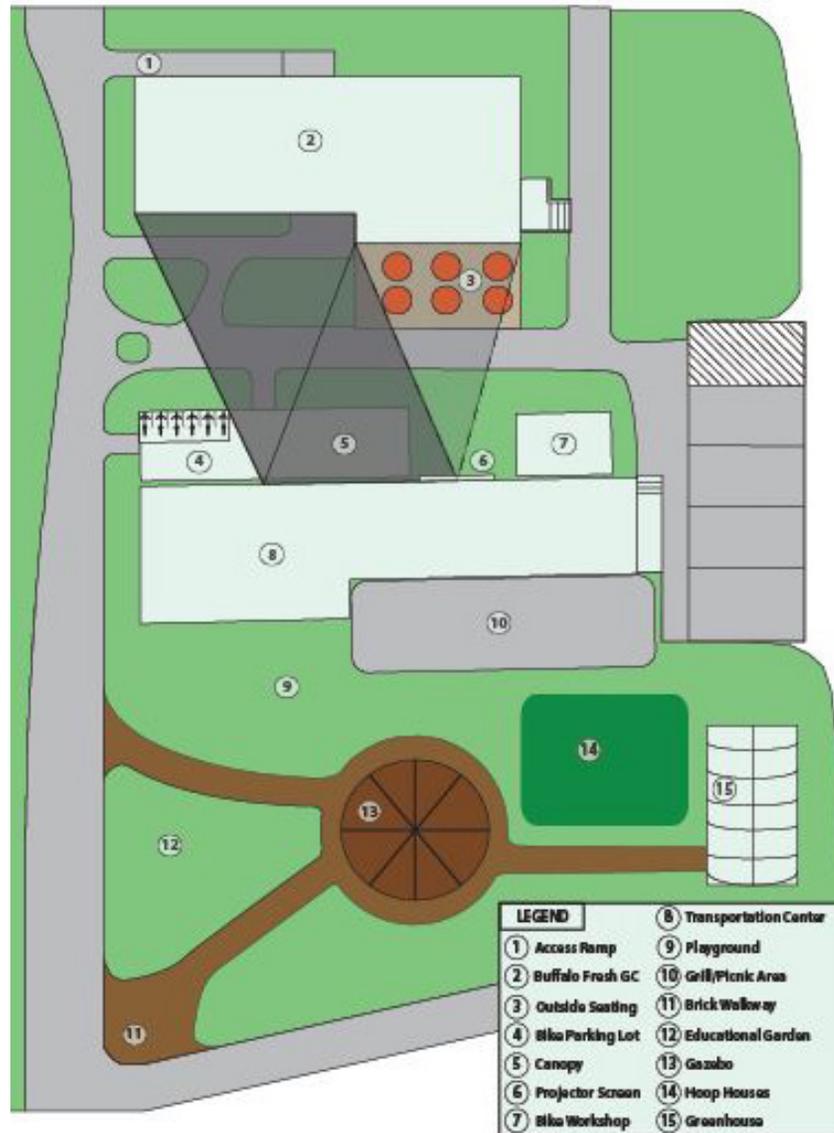
INCOME AND BENEFITS (INFLATION-ADJUSTED DOLLARS)	Number	Percent
Total households	376,954	-----
Less than \$10,000	33,458	8.9%
\$10,000 to \$14,999	22,609	6.0%
\$15,000 to \$24,999	47,403	12.6%
\$25,000 to \$34,999	39,495	10.5%
\$35,000 to \$49,999	56,351	14.9%
\$50,000 to \$74,999	70,712	18.8%
\$75,000 to \$99,999	45,530	12.1%
\$100,000 to \$149,999	40,034	10.6%
\$150,000 to \$199,999	12,683	3.4%
\$200,000 or more	8,679	2.3%
Median household income (dollars)	\$46,816	-----
Mean household income (dollars)	\$60,345	-----



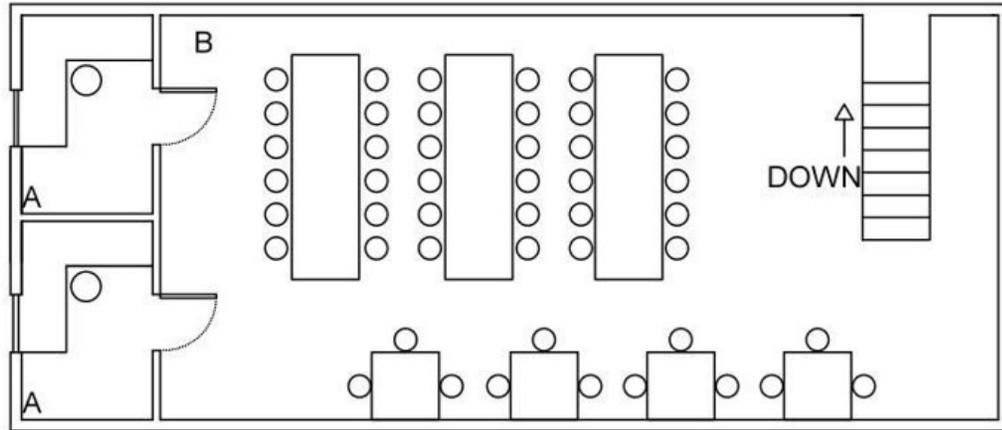
APPENDIX D

Design Proposals

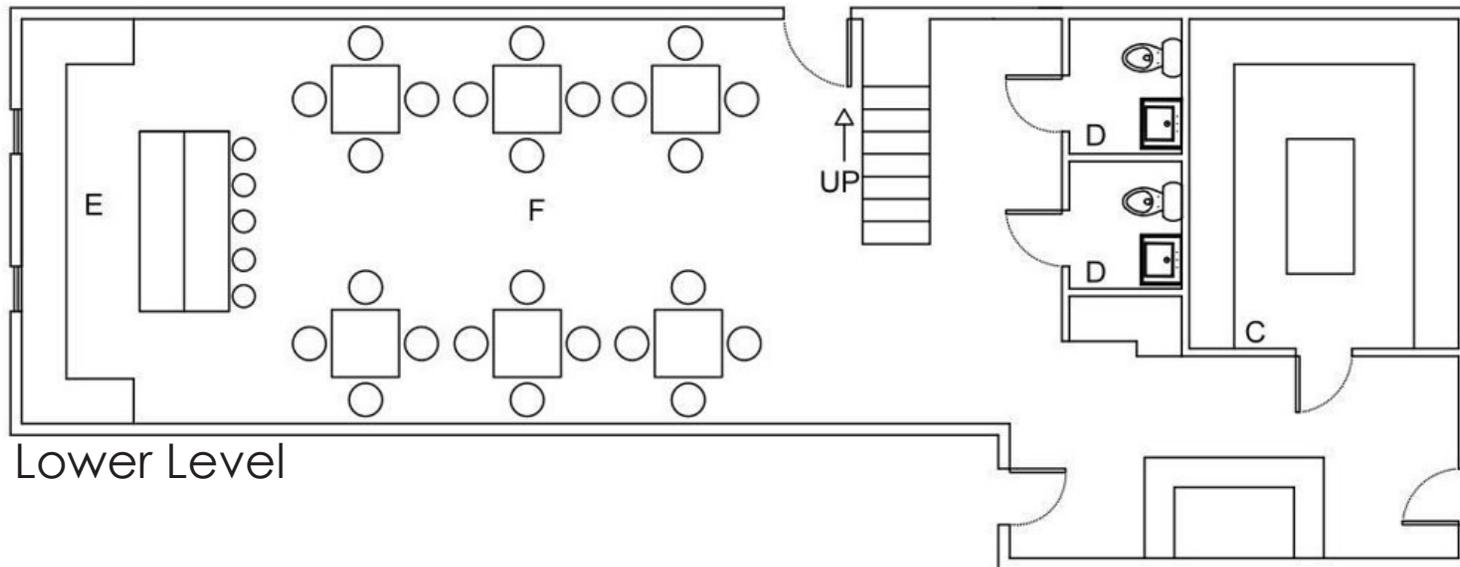
Buffalo Fresh Lot Layout



Building Floor Plans

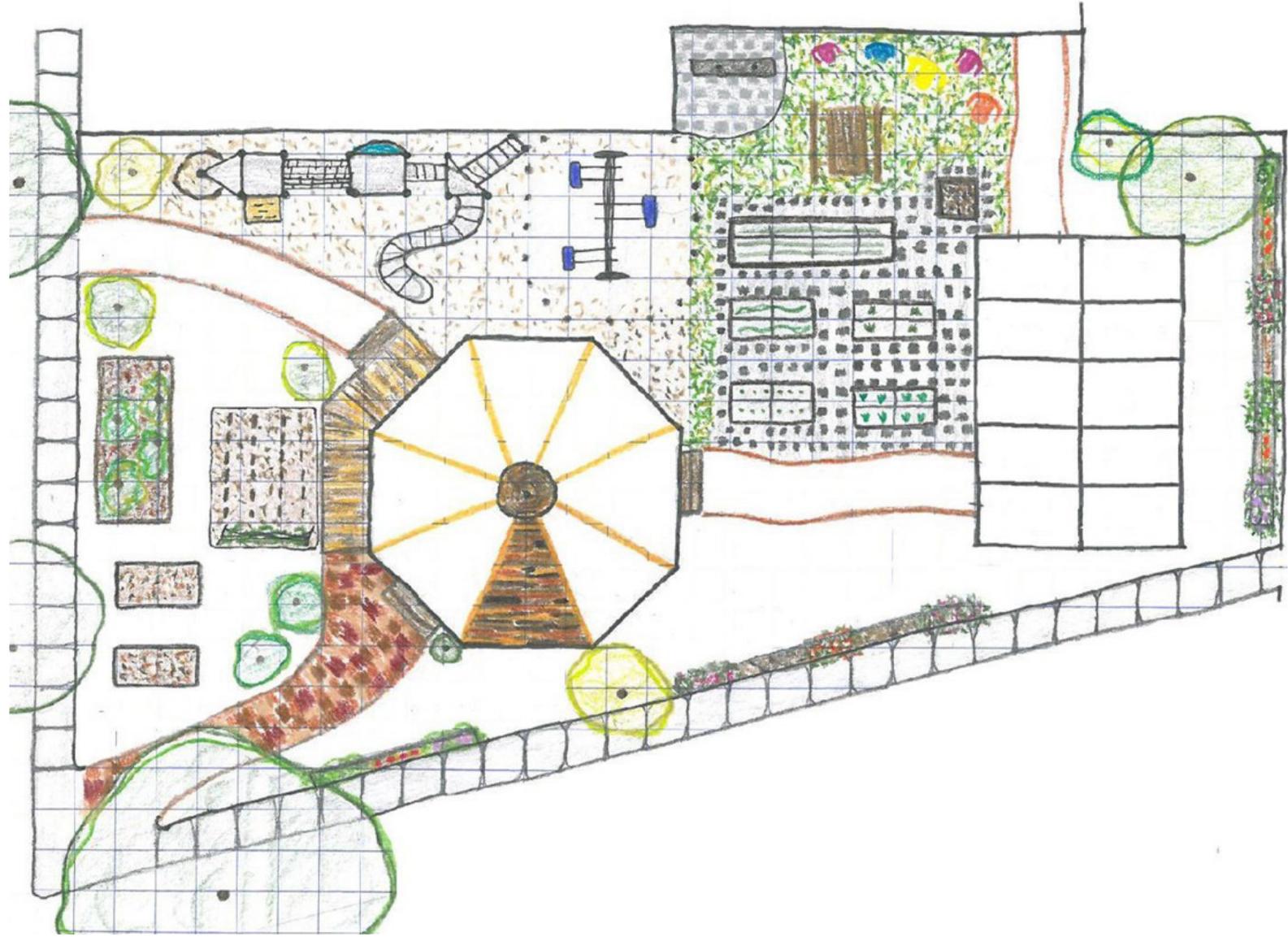


Upper Level



Lower Level

Corner Lot Design





Growing Area Layout & Design





APPENDIX E

Kitchen Materials



Option A:

Kemper Cabinets

-Style: caprice, storm finish, material: plywood

Daltile Cityview tiles

Cambria quartz countertops

-Style: Waverton

Appliances

-Sumero & Wolf

Option B:

Kemper Cabinets

-Style: northrope, oasis finish, material: plywood

Daltile Emblem Tiles

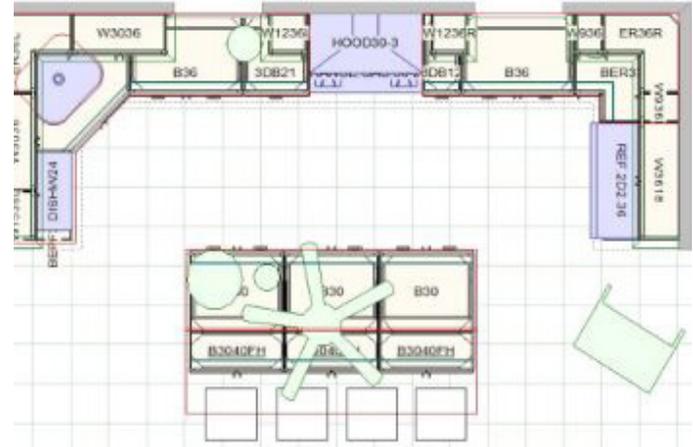
Cambria Quartz Countertops

-Style: Newport

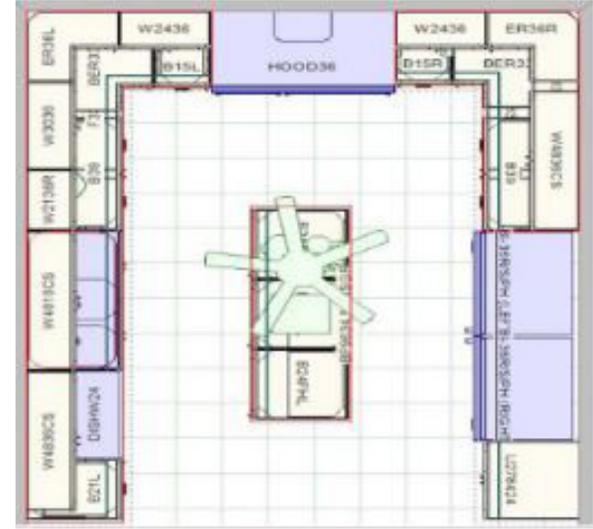
Appliances

-Sumero & Wolf

Option A:



Option B:



A. Material Specifications

Cambria Quartz

Cambria is a brand of quartz countertops that are ideal for residential and commercial applications. From vanity tops to restaurant bar tops, Cambria quartz is able to withstand a wide array of applications. Quartz is an "engineered" stone, making it highly durable. Traditional granite tops are compressed dirt that hardens over time, ultimately being harvested in slab pieces from a quarry. Granite is mainly composed of minerals such as mica, quartz and feldspar. Cambria quartz countertops are different as they are composed of quartz minerals, resin and pigment. Traditional quartz minerals are extracted from the ground and vibrocompacted with resin, epoxy and pigment to create the Cambria slabs. These slabs are then buffed, sealed and checked for imperfections before leaving the fabrication plant.

Cambria is mined in the United States, creating fewer carbon emissions in transportation and extraction. It is made of natural materials, reinforcing the green movement. The tops specified for Buffalo Fresh are equipped with an Eased edge for simple cleaning and maintenance, while being fabricated with minimal seams for a clean, continuous look.

Kemper Cabinetry

Kemper cabinets are a line of cabinetry made in the United States using sustainable methods and materials while providing a unique look to any kitchen or bath project. Kemper cabinets as specified in the plan for Buffalo Fresh are of maple wood, a renewable resource, while cabinet construction is detailed in plywood boxes. Plywood box construction is more sustainable as there are fewer chemicals and adhesives used, while boxes take less time to be manufactured. Kemper cabinetry is a Masterbrands product, seen globally in the kitchen and bath industry. These cabinets are held to a high standard of quality and often exceed industry minimums in sustainability. Kemper is part of the KCMA environmental stewardship program, reinforcing the sustainability of the product.

Daltile Tiles

Daltile is a manufacturer and distributor of tiles created in the United States and North America. Corporate headquarters are located in Dallas, Texas, reinforcing the American made product. The tiles specified for Buffalo Fresh are porcelain, making them ideal for commercial applications. Porcelain and ceramic tiles are similar, though porcelain is fired at a higher temperature. This allows porcelain tiles to be used in a wider array of applications, such as exterior sites, car dealership floors, shopping malls and more. The technical data below illustrates the commercial applications:

D.C.O.F.	Moisture	Breaking		Chemical	Abrasion
Wet	Absorption	Strength	MOH's	Resistance	Resistance
≥ 0.42	< 0.5%	>500 lbs	8.0	Resistant	N/A

A DCOF value of ≥ 0.42 is the new standard for tiles specified for commercial application in standard A137.1-2012, Section 9.6. It replaces the SCOF value of ≥ 0.60 referenced in ASTM C1028. For more information on the correlation between the two values and about the DCOF AcuTest, [click here](#) for more information or visit the Tile Council of North America's website: www.tcnatile.com

COMMERCIAL USAGE APPLICATION	INTERIOR			EXTERIOR	
	Residential	Light Commercial	Commercial	Residential	Commercial
Floors/Patios (Covered & Uncovered)	✓	✓	✓	✓	
Walls/Backsplashes	✓	✓	✓		
Countertops	✓	✓	✓		
Pool Decking					
Pool Linings	✓	✓	✓		