

Water Works Facilities Feasibility Study

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by the
Center for Business Analytics and Economic Research
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Executive Summary

This report seeks to identify feasible uses for the historic Water Works Pump House (Water Works) building located adjacent to the new Enmarket Arena in Savannah, Georgia. It considers the potential for redeveloping the building into a multiuse facility that includes a year-round farmers market, a food hall, and a business incubator. This analysis was prepared for the City of Savannah by the Center for Business Analytics and Economic Research (CBAER) at Georgia Southern University and the College of Business at Savannah State University. The report builds on the contributions provided by community leaders and greater westside Savannah residents to generate the Canal District Master Plan and Action Playbook. This plan calls for the redevelopment of the historic Water Works building into a flexible public venue that includes a community market, local stores and retail food outlets, a business incubator, and other publicly available spaces for community events.

This report investigates four potential uses for the redeveloped Water Works building, including a year-round farmers market, a food hall, a business incubator, and a commercial kitchen/kitchen incubator. These uses are compatible with the flexible public venue envisioned for the space. The team relied on various complementary data sources to develop a thorough analysis, including multiple roundtable discussions with greater westside residents and an online community survey of residents throughout Savannah. This information led the research team to examine similar facilities and gather economic data from privately and publicly available sources. The economic data focused on the target area and the greater Savannah metropolitan area. After this information was gathered and analyzed, the team determined that these are feasible uses for this building.

Discussions with greater westside residents clearly indicated that the area needs more places to purchase fresh produce, dairy products, and proteins. In addition, increased access to business development services is a top priority for many community leaders. The team used this, and other information gathered from these discussions to develop a questionnaire that was shared with Savannah residents city-wide. The results from this questionnaire found that the top desired benefits from the redevelopment included economic creation (new businesses and jobs) and developing an environment that is fun, positive, and social. Further, greater westside residents feel more strongly about learning events and other events than do citywide respondents. Based on the information provided by the community during the survey process, the top desired uses for the Water Works building include a year-round farmers' market, retail space for locally produced products, ethnic food restaurants, and an entrepreneurial center.

Using information provided by greater westside residents and the Savannah community, the team examined employment, business, and consumer spending data representing the current economic conditions in the retail market. These variables were combined to provide a view of what the current retail market is providing and what is needed the future. A retail opportunity gap suggested that the area is well served in most retail categories. This gap analysis was highly influenced by the presence of tourists close to the target area.

The finding was further confirmed by feedback provided by community leaders and data from the USDA. Greater westside Savannah was labeled by the USDA as a low-income and a low-access food area which indicates there is limited access to fresh food products in many parts of greater westside Savannah. The high level of income disparity within the radius distance area used in the gap analysis presents another challenge to address food access needs in this section of the city.

Cities like Chicago, Illinois Minneapolis, Minnesota, and Lansing, Michigan, are three examples of communities that have used local farmers' markets to address food access in low wealth communities. These markets could meet residents' demand for fresh food items, including fruits, vegetables, proteins, and dairy products. If farmers' market prices are similar to those at grocery stores, consumers are likely to use these markets and spend between \$20 and \$40 per visit. The analysis found that facilities like the envisioned Water Works design are open four days a week on average. It also found that markets will expand the number of available vendors when space outside is available during weather permitting seasons. These market facilities range in size from 1,500 square feet to 24,000 square feet. Each of these facilities offers additional services that help to support ongoing operations and draw from a variety of sources to maintain their operations, such as vendor's fees, rent paid by clients, private and governmental grants, and fees paid for hosting special events and classes. Typically, the facilities identified in the comparison group started as a farmers' market then grew to occupy the multiuse facilities they are today. In most cases, additional funding beyond the market revenues is required to ensure that operations are financially sustainable.

In addition to farmers' market vendors, these facilities also have a component similar to a food hall. Food halls provide customers with several dining options for quick meals that can be consumed on-site or taken to-go. Generally, a restaurant vendor will have a small, customized kitchen and counter space that utilizes approximately 500 square feet. Food hall vendors pay rent to the facility operators who maintain a seating area surrounding the food hall setup, while other services like marketing and promotions are handled jointly by the participant and the food hall operator.

Incubators are also a significant component to some of these facilities. A general-purpose incubator in the Water Works building is a popular idea among greater westside residents. A general business incubator can provide technical assistance, technology infrastructure, and in some cases, access to capital. The team also investigated the possibility of adding a commercial kitchen to the Water Works redevelopment. For the Savannah community and food entrepreneurs already doing business in the area, a fully functioning commercial kitchen would be a valuable addition to the community. Greater westside residents are concerned that the addition of a kitchen incubator could reduce the number of services offered to nonfood related businesses.

The analysis has found that demand for business entrepreneurial services and commercial kitchens is strong and that both projects are feasible from a market demand perspective. If a commercial kitchen is included, specific funds should be allocated to a kitchen design firm to ensure that the space is properly designed and follows best practices for this type of development. The implementation of a commercial kitchen space would mean that project

developers need to implement a strong communication strategy to ensure that greater westside residents are aware of additional business development services offered in the incubator.

The report concludes with a recommendation to the City of Savannah to proceed with the redevelopment of the Water Works building. The year-round farmers' market, food hall, and business incubator are all feasible concepts that could provide major benefits to the City of Savannah and greater westside residents. The City should begin work to secure financing for this redevelopment and prepare a design that includes the desired elements.

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Introduction

The City of Savannah is redeveloping the Canal District, which is located northeast of the historic downtown. This district includes the new Enmarket Arena, which seats about 9,500, and will be the premier venue for events in the Savannah area. The arena will be home to a professional hockey team, will regularly host concerts and other special events, and will serve as the leading destination in the district for residents and visitors. In addition to the arena, the City has been investing in the street infrastructure surrounding the property with new sidewalks, bike lanes, and lighting. These street improvements are scheduled to be completed in 2022 and serve as reminders that investment in the arena is broader than a single project. While the arena is an important part of the district, it is equally important to determine the economic value of the supplemental project to determine the true impact on the Savannah community and its residents.

Before the arena opened in early 2022, City leadership created a Master Plan and an Action Playbook for the Canal District, which includes renovating the Water Works Pump House. The City of Savannah is working with the local community to determine the best use for this building. The City partnered with the Center for Business Analytics and Economic Research (CBAER) at Georgia Southern University to assess the feasibility of converting the Water Works building into a flexible public venue that could include a permanent year-round farmers' market, local business retail space, a food hall, business development assistance for entrepreneurs, and community space for educational programs. The City partnered with the College of Business at Savannah State University to measure community support and overall preferences for the repurposing of the Water Works building. The data gathered by these two institutions has been combined in this report and will cover the feasibility of the desired uses for the building.

The research results are broken into five major segments:

- In the first section, the team analyzes the data collected by the community survey. This data helps determine neighborhood demand for services that could be provided by the Water Works renovation project.
- In the next section, the team examines similar multiuse facilities in comparable communities along with a look at the population and economic characteristics that focus on local supply and demand factors. It considers the benefits and challenges of general-purpose business incubators and kitchen incubators.
- The third section conducts an overview analysis of the retail and food services market in Savannah and Chatham County.
- In the fourth section covers the level of interest by farmers, ranchers, and other local vendors regarding participation in the farmer's market portion of the development.
- In the final section, a budget and financial requirements analysis is offered before ending with a suggested list of actions to consider moving forward.

Community Viability

The City of Savannah has a vision to convert the old Water Works buildings into a community market and business incubator. Conversations with residents reveal some similarities in their desires for the redevelopment though their priorities and focus areas differ amongst the varying interest groups. Greater westside residents' desires have been captured through in person meetings as well as the use of a community survey. In this section of the report, the results of the community survey are presented and discussed followed by a comparative analysis of similar facilities with an emphasis on a permanent farmers' market and a business incubator space. The inclusion of these two features was a common theme throughout the responses of both the City of Savannah staff and local community members.

Community Survey

Although the Water Works redevelopment could meet the needs of some businesses in the region, it is important to both the researchers and the City of Savannah to investigate how local residents view this redevelopment. As part of this effort, the City of Savannah requested the research team conduct a community survey to solicit those views. The objective of this research is to determine among Savannah and greater westside residents what benefits the new Water Works Market should provide, what events and classes could be offered, and what type of retail or entrepreneurial venues might be appropriate. To meet this objective, Savannah State University developed a questionnaire which was made available to residents. The complete questionnaire is available in Appendix A.

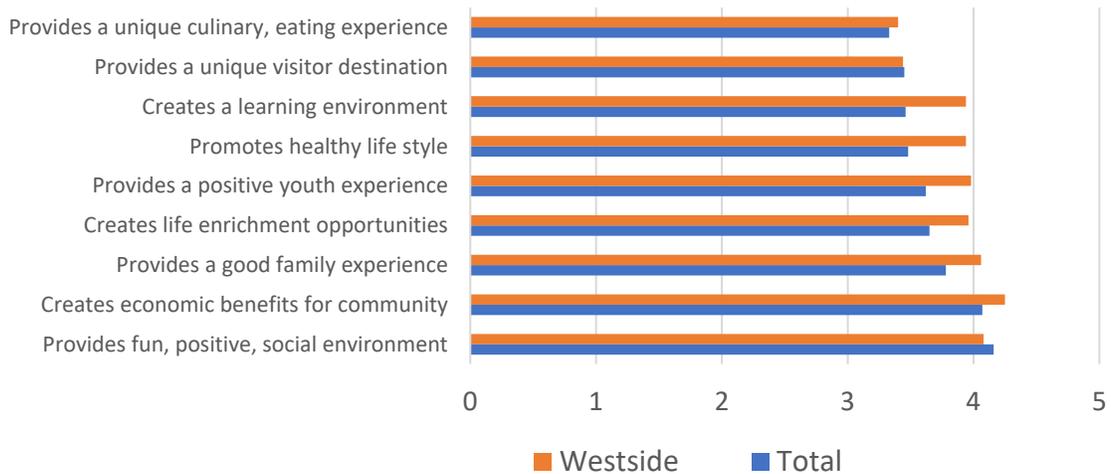
Conversations in August and November of 2021 with the Savannah Arena Community Taskforce (SACTF), a group comprised of the City and greater westside Savannah community stakeholders. These discussions helped to structure the final quantitative questionnaire used for this study. The core of the questionnaire measures which type of community development services as well as retail and event venues that might resonate with nearby community members and other residents in the City. It also measures awareness of the Water Works redevelopment, participants' interest in visiting the Water Works buildings once the redevelopment is completed, and what factors might affect or inhibit their desire to visit the site.

Participants were contacted through a variety of methods. The questionnaire was made accessible on the City of Savannah's website from approximately December 3, 2021 through December 31, 2021. In addition, individuals without computer access were given the opportunity to respond through a phone interview. The survey was distributed extensively through the City's social media channels, local news stories, community stakeholders, and neighborhood associations. In total, 695 usable surveys were obtained; 48 or about 7% were completed by greater westside residents. For comparison, the team separated greater westside resident responses from all or total responses.

The research study started with determining participants' awareness of the Enmarket Arena and the Canal District before participating in the survey. In total, 90 percent of Savannah respondents and 98 percent of greater westside respondents were aware of the new Enmarket Arena prior to participating in the questionnaire. Subsequently, participants were asked about their awareness of the Water Works redevelopment. For this question, 49 percent of Savannah respondents and 67 percent of greater westside respondents were aware of this redevelopment beforehand.

The next question measured the *importance* of certain *benefits* that the Water Works redevelopment may provide for the Savannah community. For each benefit, participants were to select its level of importance to themselves using a five-point scale with one as “not at all important,” and five as “extremely important.” Figure 1 provides the mean response of all Savannah and greater westside participants for each of the potential benefits listed in the questionnaire. Please note that when comparing the mean ratings of total residents versus greater westside residents for all Figures, a difference of at least .20 is needed for the groups’ mean interest scores to be statistically different from each other.

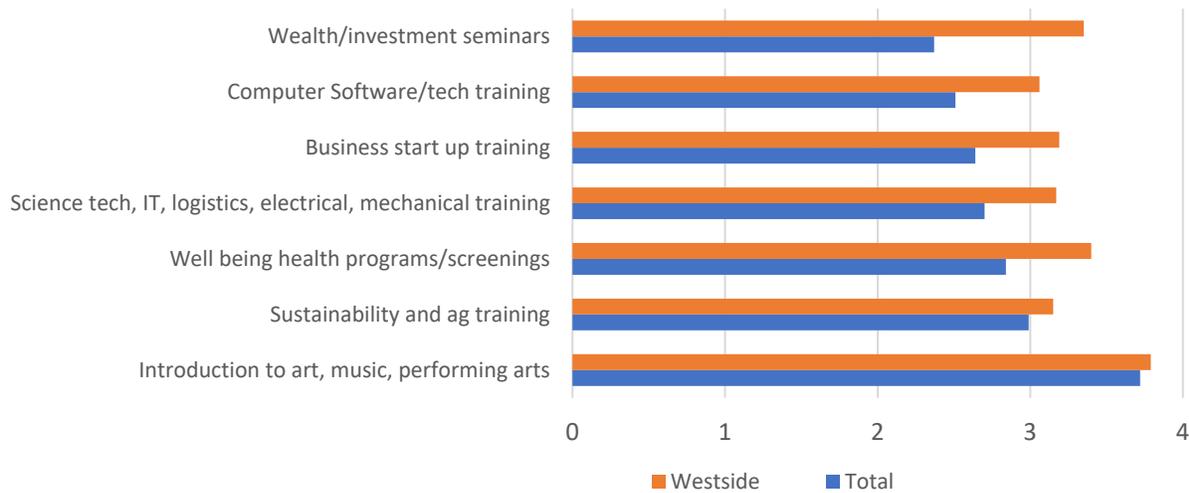
Figure 1: Benefit Mean Ratings



Within this question all the *benefits* are moderately to very important to the respondents. Both participant groups agree on the top three benefits: providing a fun, positive and social environment, creating economic benefits for the community, and providing a good family experience. Providing a good family environment is rated statistically higher by westside residents compared to all Savannah residents, as well as creating life enrichment opportunities, providing a positive youth experience, promoting a healthy lifestyle, and creating a learning environment. Creates a learning environment, promotes a healthy lifestyle, provides a positive your experience, creates life enrichment opportunities and provides a good family experience were all statistically higher rated by greater west side residents versus all Savannah residents

Next the research team gauged participants’ interest in learning events that could be held at the Water Works Market. The question is similarly designed as the previous one with a five-point scale where one is “not at all interested” and five is “extremely interested.” Displayed in Figure 2 are the learning events studied and the mean response for both groups of participants.

Figure 2: Mean Interest by Learning Event

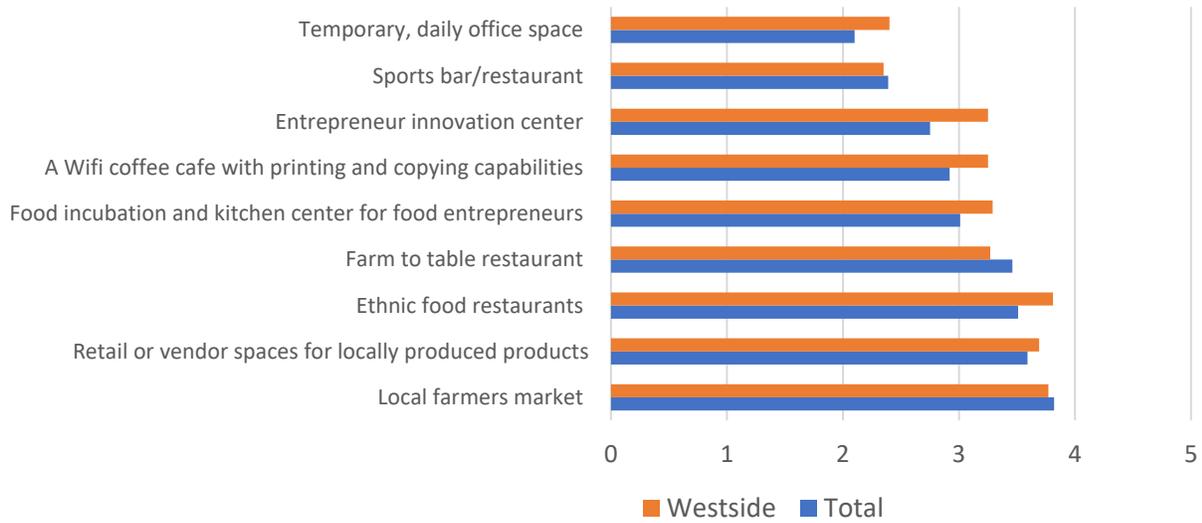


Of the learning events studied, both groups are most interested in introduction to art, music, and performing arts learning events. Women express more interest than men in art, music, and performing arts. The remainder of the learning events studied in this questionnaire only slightly appeal to all Savannah residents. On the other hand, greater westside residents are at least moderately interested in these options with a slightly higher interest in wealth and investment seminars as well as wellbeing health programs and screenings. Greater westside residents' interest in all events except for sustainability and agricultural training and introduction to art, music, and performing arts is statistically higher than all residents' interest. Overall, women show more interest than men in wellbeing programs and screenings as do those aged 25 to 54. Age also plays a factor in software training interest with residents aged 65 to 74 less interested in this type of event.

In addition to the specific learning events studied, the questionnaire provided participants the opportunity to suggest additional program ideas that appeal to them in an open-ended question. These responses could reflect the desires of one individual or many. The most common responses include local, black, industry, and Water Works historical topics, environmental preservation and sustainability, literacy and mental health workshops, adult and youth financial and money management literacy, youth programs, woodworking cabinetry, and culinary or cooking programs.

The study determines participants' interest in potential uses of the renovated Water Works buildings. These uses are organized into three general categories, which are entrepreneurial development, retail, and restaurant/prepared food sellers. Community interest in potential uses of the Water Works buildings is measured using the same five-point interest scale used in the benefits question. Figure 3 lists the potential uses studied and the mean interest of greater westside and total residents.

Figure 3: Venue Interest Rating

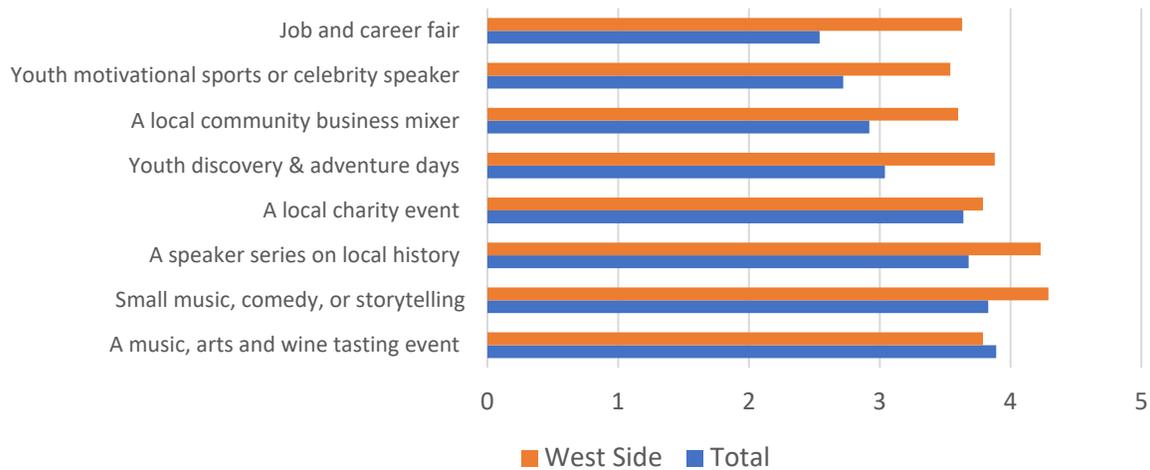


Both greater westside residents and all Savannah residents are most interested in the concepts of a local farmers’ market, retail spaces for locally produced products, and ethnic food restaurants. Women are more interested than men in these uses as well. While all Savannah residents are slightly more interested in farm to table restaurants than are greater westside residents, those on the greater westside are more interested than the rest of Savannah in a food or kitchen incubator, a café with Wi-Fi and printing/copying capabilities, and an entrepreneur innovation center. The Wi-Fi café and the entrepreneur innovation center are statistically more interesting to westside residents. Those aged 65 to 74 exhibit more interest in the innovation center than those aged 25 to 54. Men show more interest in the sports bar and restaurant, but the average sentiment of all participants toward this use is well below other uses.

Again, participants were asked to express other additional ideas for potential uses of the Water Works redevelopment in an open-ended question. These responses could reflect the desires of one individual or many. Some of the ideas presented by the community include art gallery, microbrewery, youth after school center, park or playground, local goods gift shop, fish market, flea or antique market, science technology museum, health and wellbeing center, and a creative space for crafting, art, film, and recording.

This questionnaire included a second events question which focuses interest in attending certain entertainment and community events. This question is measured with the same five-point scale previously used. Results are displayed in Figure 4.

Figure 4: Event Interest Ratings



Of the events listed, all Savannah area participants are most interested in a music, arts, and wine tasting event, and a small music, comedy, or storytelling event. A speaker series on local history and local charity events is also highly rated by this group. Greater westside residents are highly interested in these same four event types; however, they exhibit more interest than their Savannah counterparts in a local history speaker series and a small music, comedy, or storytelling event.

Greater westside residents are significantly more interested than Savannah residents in community development events for both youth and adults. These include youth discovery and adventure days, youth motivational sports or celebrity speakers, job and career fairs, and community business mixers. Within the questionnaire event options, women are more interested than men in attending the speaker series on local history and the youth discovery and adventure days. Those aged 18 to 24 reveal higher interest in the job and career fair than most other age groups and in the music, arts, and wine tasting event than those aged 55 to 74.

Some additional events that participants have expressed interest in other than those listed include holiday events, antique fairs, author book signings, poetry nights, food festivals, craft fairs, theater and film screenings, food truck block party, bike swaps, video game competitions, senior topics and social events, women in business speaker series, and competitions or fairs for the arts, sciences, and technology fields. As answers to an open-ended question, these responses could reflect the desires of one individual or many.

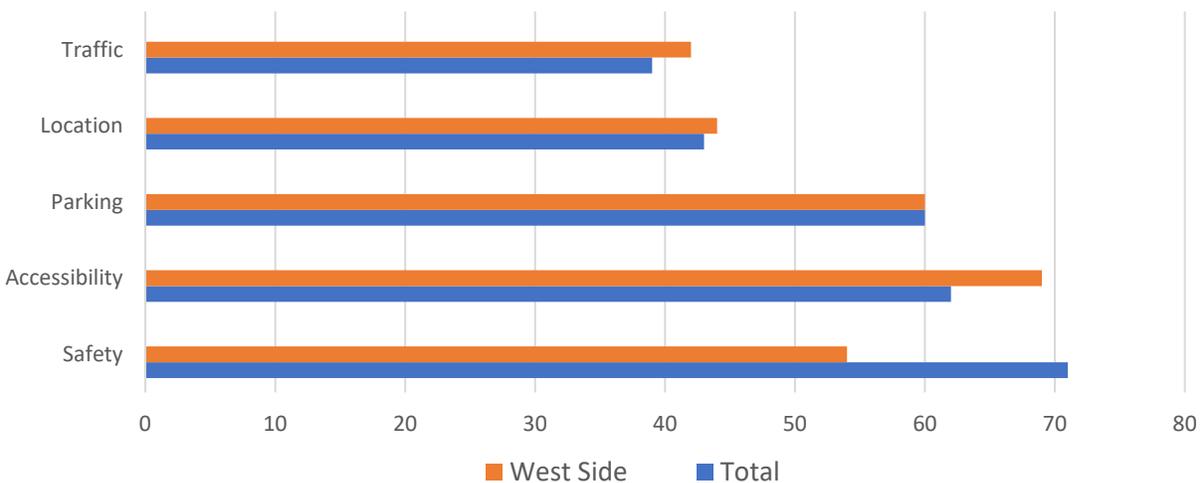
After studying resident interest in certain events and facility uses, the team identified which factors might prevent individuals from using the redeveloped Water Works facility. The list of potential barriers is identified by using the percent of respondents who indicated “probably yes” or “definitely yes” as to whether the particular item would affect their desire to go to the Water Works site.

Close to 90 percent of Savannah residents and 85 percent of greater westside residents say they are interested in utilizing and visiting the Water Works Market. Based on historical case studies

on actual behavior versus “purchase or use intent,” these numbers may actually be closer to a 50-60 percent interest when discounted properly. Through further study using a factor analysis and modeling techniques, the benefits factors, including all venues but the innovation center and office space have the strongest relationship (lowest significance number – see Appendix B) with residents’ desire to go to the Water Works Market once completed. The two event factors also have a strong relationship with residents’ desire to go to the Water Works Market. In other words, having the above-mentioned benefits or venues are associated strongly with residents’ desire to utilize or visit the Water Works redevelopment.

The model reveals that other unknown factors may motivate the residents to come to the Water Works facility. It shows that an incubator or innovation center would not influence residents to come to the Water Works redevelopment. There are small differences between an incubator which helps “new and early-stage businesses grow by providing office space, coaching, resources, and access to capital.”¹ While an “innovation centers “offer a combination of services like maker space, office space, labs, services, resources... and help all stages of companies.”² This sentiment fits with the standard usage for this type of facility. Many community members do not plan to open a business nor are searching for office space. Facilities that offer these services usually target those with specific needs, making the space less desirable to the general public.

Figure 5: Percent of "Definitely" and "Probably" Affecting Desire



Several things may further affect the desire to go to the Water Works Market, which are displayed in Figure 5. More than 70 percent of Savannah area participants indicate that safety may affect their desire to visit the Water Works facility. Almost an equal percentage of greater westside residents identify accessibility (ability to travel to) as the leading factor. Though safety

¹ *What’s the Difference Between an Incubator, Accelerator, and Coworking Space?* (n.d.). Business Incubators. Whitewater University Innovation Center. Retrieved from <https://whitewateruniversityinnovationcenter.org/startup-success-blog/whats-the-difference-between-an-incubator-accelerator-or-coworking-space>

² *Ibid, What’s the Difference Between an Incubator, Accelerator, and Coworking Space?*

is less important to greater westside residents by approximately 20 percent, just over half of this group still considers safety a determining factor.

Both City and greater westside residents indicate Parking might affect their desire to visit the facility, with 60 percent citing this as one factor. However, traffic and location are important to less than half of either group. In an open-ended question, several other influential factors are acknowledged by questionnaire participants. These responses could reflect the desires of one individual or many. Having locations on a public transportation or trolley route, connections to bike paths and lock up areas, access to electric vehicle chargers, accommodations for seniors and those with disabilities, a police presence, and a reasonable cost for parking fees were all responses gathered from participants.

In summary, the research team discovered that greater westside residents feel many of the benefits, learning events, and other event types that are listed in the questionnaire are more important or more interesting than overall City residents do. The top desired benefits by all residents are creates economic benefits for the community, having an environment that is fun, positive, and social, and provides a good family experience. Greater westside residents express an equal amount of interest in a positive youth experience, promotion of a healthy lifestyle, and life enrichment opportunities. Learning events with the highest interest from all residents are introduction to art, music, and performing arts in addition to well-being programs. Greater westside residents also rate wealth investment activities as very important. The most preferred venues are a farmers' market, retail space for locally produced products, and ethnic food restaurants. Lastly, while most other events listed in the questionnaire are highly rated by greater westside residents, the two events gaining top interest are a speaker series on local history and a small music, comedy, or storytelling event.

Comparison Facilities Market Analysis

When considering a redevelopment to create a combined permanent year-round farmers' market, retail, food hall, and incubator space as large and involved as renovating the Water Works buildings in Savannah, it is helpful to look at similar established facilities. Reviewing other successful organizations and projects can provide confidence in the planned Water Works redevelopment and inspire vision for the final facility. For the comparison group analysis, five cities were chosen: Lansing, MI; Flint, MI; Nashville, TN; Charleston, SC; and Chattanooga, TN.

Originally, comparisons were chosen based primarily on population and the presence of farmers' markets and food incubator programs. After discussions at the November stakeholder meeting, the team considered other location factors that local community members expressed as important. The comparison cities and the descriptive statistics important to community members are displayed in Table 1.

Table 1: Comparison City Demographics

Location	Population	GDP	Poverty Rate	HS Grad Rate	Crime Rate	Pop. Aged 65+	Unemp. Rate
Savannah, GA	145,503	\$22,775	21.9	89.7	21	13.3	2.3
Lansing, MI	117,159	\$27,287	27.1	64	4	9.7	3.8
Flint, MI	96,559	\$29,235	41.2	81.7	12	10.5	6.1
Nashville, TN	692,587	\$62,345	17.2	82.3	3	11	2.7
Charleston, SC	135,257	\$45,592	14.6	92.6	18	13.5	2.9
Chattanooga, TN	179,690	\$26,543	20.7	87.2	1	15.2	2.9

Rates in percentages; Crime rate is percentage of US cities less safe than the location.

Sources: Census Bureau, Bureau of Labor Statistics, Neighborhood Scout, FRED Economic Data

The facilities in Nashville, Lansing, and Flint reflect the main elements for the City’s vision of the Water Works redevelopment: restored historic building(s), year-round farmers’ market, food hall/restaurants, food incubator program/shared kitchen space, and community services in one area. The operational structures of these facilities also address the concerns of local community members who live in the neighborhood surrounding the Water Works building, including elements of affordability and product variety at the farmers’ market as well as the vision for a community gathering space and access to educational and skill building opportunities.

Charleston, South Carolina and Chattanooga, Tennessee were also identified as comparison cities since they have comparable demographics and have been compared to Savannah in similar feasibility studies for the area. Both cities have seasonal farmers’ markets as well as shared kitchen space(s) and separate incubator programs. These components are not affiliated with each other, nor are they co-located. These cities invested in workforce development by leveraging community assets to create higher paying jobs. They both created downtown Innovation Districts that are home to various incubator, startup, and entrepreneurial programs all in one central location.

For additional insights, the research team reached out to local resources like the River Street Marketplace in Savannah, Pennsylvania Avenue Resource Center, Savannah Ghost Kitchen, and Forsyth Farmers Market.

Permanent Farmers’ Market

Permanent farmers’ markets provide access to fresh food by operating in a space, often an enclosed building, where farmers and other vendors can sell their products year-round.³ Although the concept does not differ from a seasonal farmers’ market (a market that is operational only during a specific season, usually summer into fall), the permanency of the permanent farmers’ market magnifies the positive effects these establishments have on their local communities. Traditionally seasonal farmers’ markets provide consumers access to fresh food

³ Barbour, E., Hunter, A. A., Jones, J., Whiting, J., and Wetzal, P. (May 2014). *An Exploration of Permanent Farmers’ Market Structures*. Smith College Center for the Environment, Ecological Design and Sustainability. Retrieved from <https://www.northamptonma.gov/DocumentCenter/View/3001/Permanent-Farmers-Markets-FINAL-COPY?bidId=>

products, support local businesses, and serve as a regular social event for the community to gather and interact.⁴ Permanent farmers’ markets achieve this but on a larger scale due to being operational year-round.

The comparison facilities range in size. For example, Flint Farmers’ Market is 30,000 square feet, 13,000 of which covers the market. The Allen Neighborhood Center uses their multipurpose great room for the market when it is operational, which accounts for 1,500 square feet. However, during the outdoor season (May – October) the market expands into the parking lot, which expands the market to cover approximately 7,000 square feet total. The redeveloped Water Works building is estimated to have 25,000 square feet, 15,500 square feet on the ground level and 10,000 square feet on the upper level.⁵ These examples show that the redeveloped Water Works building could use as little as less than 2,000 square feet for the market portion of its operations or can expand to an even greater area by utilizing the parking lot if demand requires it.

Table 2: Comparison Permanent Market Operational Structures

Facility	Location	Facility Size	Market Hours of Operation	Number of Market Vendors	Number of Staff
Flint Farmers’ Market	Flint, MI	Building: 30k sq. ft. Farmers’ Market: 13k sq ft.	Tuesday, Thursday, Saturday 9 a.m. – 5 p.m.	Year-round: 45 - 50 May – Oct: Additional 45 outside	3 full-time 5 part-time
Allen Neighborhood Center	Lansing, MI	Commercial kitchen- 4,000 sq. ft., Great room for market – 1,500 sq. ft. Market great room + parking lot May - Oct: 7,000 sq. ft.	Wednesdays May – Sept 2:30 – 7 p.m. Oct – May 3 – 6:30 p.m.	During indoor season Nov-April: 10-12 During outdoor season May-Oct: 15-20	10 full-time
The Nashville Farmers’ Market	Nashville, TN	Two covered open-air sheds and 24,000 sq. ft. garden center, Market House	Market House: Sunday – Thursday, 8 a.m. – 4 p.m.; Friday – Saturday, 8 a.m. – 6 p.m. Farm Sheds: Friday – Sunday, 9 a.m. – 2 p.m. Gardens of Babylon: Daily, 8 a.m. – 6 p.m.	Market House: 20 (restaurants, retail, and other vendors) Farm Shed: 150+	7 full-time

⁴ Ibid, Barbour, Hunter, Jones, Whiting, and Wetzel.

⁵ *Savannah Water Works Pump Station: Proposed Adaptive Reuse Concepts*. (1 July 2020). Harris+Smith and Cardno, Inc.

Operations

The year-round component is the defining feature of a permanent farmers' market. However, the comparison group's permanent markets vary in their hours of operation. The Allen Farmers' Market is only open on Wednesdays, and the season dictates the times during which the market will be open. Flint Farmers' Market is open three days a week (Tuesday, Thursday, and Saturday) from 9 a.m. to 5 p.m. The Nashville Farmers' Market on the other hand is open every day for 10 hours. In Savannah, the River Street Marketplace is open year-round with hours varying during the time of year (e.g., longer hours in the summer, shorter hours in the winter). Vendors are required to run their businesses during market hours, but each vendor is allowed to take one day off between Monday and Thursday.

Although the Flint, Allen, and Nashville markets are open year-round, there are portions of the markets that operate seasonally. For example, Flint Farmers' Market has room for an additional 45 vendors utilizing a portion of the parking lot May through October, doubling the number of vendors they can host during the busiest growing season. The Nashville Farmers' Market has two seasonal sheds, which are open-air, covered sheds, opened during their respective seasons, one in the winter and one in the summer.

While not a permanent market, the Chattanooga Market operates several locations throughout the year with the main market at the First Horizon Pavilion (open air market under a pavilion) operating from April to November, 10 a.m. to 5 p.m. on Saturdays and 11 a.m. to 4 p.m. on Sundays. This market features over 50 farms and 130 artisans with a variety of produce and products.⁶ Another seasonal farmers' market, the Charleston Farmers' Market's regular season is March through November on Saturdays from 8 a.m. to 2 p.m., with additional Sunday dates during the Piccolo Spoleto Festival in May and June as well as Saturdays and Sundays in December for the special holiday market. These markets have operations similar to those of the local Forsyth Farmers Market.⁷ The Forsyth market is Saturdays from 9 a – 1 pm at Forsyth Park. It has 62 vendors selling both produce and prepared food vendors. It is also well known locally for the artisans that sell products at this event.

The comparison markets operate with relatively small staff numbers. The Allen Neighborhood Center has the largest staff to run all components of the facility with 10 full-time employees. The Flint Farmers' Market has eight employees -three full-time and five part-time,⁸ which includes a Culinary Director of the Flint Food Works kitchen space and the Market Manager. According to Maria Marton, Operations and Finance Manager at the Nashville Farmers Market, they have seven full-time positions and one part-time seasonal position.⁹ Chattanooga's Public Markets, a nonprofit organization that oversees five markets across the city has a staff of eight full-time employees and seasonal support of nearly three-dozen people.¹⁰

⁶ *Chattanooga Market*. (n.d.). Retrieved from <https://www.visitchattanooga.com/listing/chattanooga-market/1590/>

⁷ *Who We Are*. (n.d.). Forsyth Farmers' Market. Retrieved from <https://forsythfarmersmarket.com>

⁸ Phone conversation with Karianne Martus. (17 November 2021).

⁹ Email correspondence with Maria Marton. (3 March 2022).

¹⁰ *About Us*. (n.d.). Chattanooga Market. Retrieved from <https://chattanoogamarket.com/about/> (accessed February 2022).

River Street Marketplace in Savannah Property Manager, Mark Halliday stresses the importance of having good staff. He explains that the manager needs to ensure they work well with people because market managers will be required to interact with a variety of personalities. He explains the custodial staff doesn't need to be big, but they need to be effective and support vendors in maintaining their spaces.¹¹

Halliday suggests a system that allows for balance in the marketplace so that all vendors are not selling the same products. The variety of vendor types is echoed by the manager of the Flint Farmers' Market, whose vendors are required to submit a list of proposed products they intend to sell for approval, and new vendors are considered based on the uniqueness of their items compared to those from preexisting vendors.¹² Second, Halliday explains layout is very important. He suggests products sold closer to entrance ways should be more expensive than items sold in the back.¹³ Finally, each of these markets reported having a diverse group of vendors and customers that reflects their communities.

Fresh Food Options

Access to a variety of affordable food products is of high importance to the surrounding Canal District neighborhood.¹⁴ The SACTF members have expressed a desire for access to food products beyond vegetables as they have a few community gardens and no true grocery stores, rendering them a low income and low access food area.¹⁵ Taskforce members asked for access to "real food" from the potential farmers' market, meaning products such as milk, meat, and eggs at affordable prices in addition to fresh grown fruits and vegetables.¹⁶ The farmers' markets at the comparison facilities illustrate that this is an attainable goal. Not only do these permanent markets offer seasonal produce, but they also offer other year-round goods like fresh milk, eggs, meat, honey, and baked goods.

Allen Farmers' Market offers a variety of products that change week to week. For example, on February 9, 2022, their market offered locally roasted coffee beans, eggs, pork, lamb, goat and cow milk cheeses, goat milk, goat meat, beef, mushrooms, bread, pastries, and maple syrup in addition to vegetables, honey and other common products.¹⁷ Both Flint Farmers' Market and the Nashville Farmers' Market advertise a wide array of products such as fruits, vegetables, dairy and cheese, eggs, and meat, with Flint also promoting alcoholic and nonalcoholic beverages, spices and herbs, and baked goods¹⁸ and Nashville offering seafood.¹⁹

¹¹ Phone conversation with Mark Halliday. (14 March 2022).

¹² *Vendor Policies and Rates*. (n.d.). Flint Farmers' Market. Retrieved from <https://www.flintfarmersmarket.com/our-vendors/policies-and-rates/>.

¹³ Phone conversation with Mark Halliday. (14 March 2022).

¹⁴ Conversations with local community members. (18 November 2021).

¹⁵ Conversations with SACTF. (14 September 2021).

¹⁶ Conversations with local community members. (18 November 2021).

¹⁷ Allen Farmers Market. Retrieved from <https://mailchi.mp/allenneighborhoodcenter/this-week-at-the-market-outdoor-market-opening-day-1712460> (accessed 8 February 2022).

¹⁸ Flint Farmers market. Retrieved from <https://www.flintfarmersmarket.com/our-vendors/>

¹⁹ *The Farm Sheds*. (n.d.). Nashville Farmers Market. Retrieved from <https://www.nashvillefarmersmarket.org/market> (accessed February 2022)

Affordability

Permanent farmers' markets contribute to a local economy even more than a seasonal farmers' market does because they operate year-round whereas seasonal farmers' markets are operational for only a portion of the year. They create an opportunity for agricultural producers to receive a more reliable stream of income through year-round income generation, creating a better-established customer base, and through their capability in lowering prices due to the lack of a middleman, which is more attractive to customers.²⁰ The major comparison group facilities participate in programs that provide financial assistance in purchasing vendor products, which allows more people to shop at the farmers' markets. Additionally, because these facilities are multifaceted, they bring in revenue through a variety of means in addition to operations related to the farmers' market.

Four of the comparison facilities participate in the Supplemental Nutrition Assistance Program (SNAP) with many of their farmers' market vendors accepting EBT cards. Allen Neighborhood Center claims to be the first farmer's market to offer SNAP/EBT. In 2020 Allen Farmers' Market saw people receiving the maximum amount of their benefits as pandemic relief for a total of \$15,371.²¹ While in Savannah Forsyth farmers market has partnered with Step Up Savannah to help individuals sign up for SNAP/EBT benefits. This form of payment is accepted at both the Saturday Farmers' Market and at the Farm Truck 912 stops/pop-ups.²² Farm Truck 912 is "a mobile farmers' market that brings local and seasonal fruits and vegetables to Savannah neighborhoods."²³ It accepts and also doubles SNAP/EBT benefits.

Each comparison market has a dollar-for-dollar match program. The Allen Neighborhood Center provides additional financial assistance options through their acceptance of the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) and the Market Fresh initiative for older adults that includes a coupon value of \$20 and free nutrition counseling.²⁴ The State of Michigan along with federal funding and other Michigan partners support Double Up Food Bucks which matches fruits and vegetable purchases up to \$20 per day.

Food Halls

Some of the comparison facilities also have food hall elements in their design. A food hall is a popular concept that is structured similar to a food court, with multiple restaurant options sharing one communal seating area. The biggest difference is that food courts typically host fast food chains. The restaurant vendors available at a food hall are local businesses with their own equipment on-site, and vendors might even sell food-related products or services other than

²⁰ Ibid, Barbour, Hunter, Jones, Whiting, and Wetzel.

²¹ *ANC Annual Report 2020*. (2020). Allen Neighborhood Center. <http://allenneighborhoodcenter.org/wp-content/uploads/2021/04/Annual-Report-2020.pdf>

²² *SNAP/EBT Enrollment*. (n.d.). Forsyth Farmers' Market, Inc. Retrieved from <https://forsythfarmersmarket.com/snapebt-enrollment> (accessed February 2022)

²³ *Farm Truck 912*. (n.d.). Forsyth Farmers' Market, Inc. Retrieved from <https://forsythfarmersmarket.com/farmtruck912> (accessed February 2022)

²⁴ *Allen Farmers Market*. (n.d.). Allen Neighborhood Center. Retrieved from <https://allenneighborhoodcenter.org/market/>

prepared foods, such as fresh meat or knife sharpening.²⁵ This concept appears to correlate well with the farmers' market concept, as evidenced by the activity amongst the comparison group.

At the Market House at Nashville's Farmers' Market, 20 locally owned shops and restaurants showcase a variety of cuisine including Classic American, Chinese, Middle Eastern, Mexican, Caribbean, and more.²⁶ Because these are individually owned businesses, the Market House is open during certain times, but restaurant and shop hours may vary. Though Flint Farmers' Market has half the restaurant vendors compared to Nashville, they still offer a variety of tastes from sushi to barbecue to gyros.²⁷

Just like farmer's market vendors, food hall restaurants vendors should provide a variety of options to consumers. Applicants and managers may want to consider popular food trends, such as eco-friendly packing for goods, plant-based proteins, healthy bowls, scratch-made meals, and unique cuts of meat. These were the top food trends expected for 2020 noted by the National Restaurant Association before the pandemic hit.²⁸

Revenue Streams

It is important to highlight that the larger comparison facilities started as modest farmers' markets that have grown over time to become the multiuse facilities they are today. Vendors at the markets pay nominal fees for the space to sell their goods, so fees alone are not enough to sustain the financial demands of each facility. In their current operational structures, the comparison group utilizes several options for generating revenue beyond rental fees from vendors. The only comparison market that relies primarily on fees from vendors, members, and sponsors is The Chattanooga Market.²⁹

The facilities in Flint, Lansing, and Nashville bring in additional revenue by charging membership fees to incubator clients and hourly rates for use of commercial kitchen space. These markets also seek out other means of funding such as grants and financial assistance from agencies including the U.S. Department of Agriculture (USDA).

The Flint Farmers' Market, previously operated by the City of Flint, was released to the Uptown Reinvestment Corporation, a private non-profit, in 2001. Flint Farmers Market currently receives no government funding. Its operations are heavily subsidized by the local Mott Foundation. It also receives sponsorship revenue from organizations like the Health Alliance Plan and ELGA Credit Union. Manager Karianne Martus said that the smartest move they made in moving and expanding was the dedication of community event space, which has been a great revenue stream to help with high overhead costs. In 2021 they hosted 22 weddings and several high school

²⁵ March, S. (26 December 2018). *What's the Difference Between a Food Hall and a Food Mall?* Mpls St. Pual, Key Enterprises, LLC. Retrieved from <https://mspmag.com/eat-and-drink/food-hall-or-food-mall/>

²⁶ *Restaurants & Shops*. (n.d.). Nashville Farmers' Market. Retrieved from <https://www.nashvillefarmersmarket.org/mh-restaurants-and-shops>

²⁷ *Restaurants*. (n.d.). Flint Farmers' Market. Retrieved from <https://www.flintfarmersmarket.com/our-vendors/restaurants/>

²⁸ Hartley, A. (11 February 2020). *The National Restaurant Association's Top 10 Food Trends of 2020*. Alto Hartley. <https://althartley.com/the-national-restaurant-associations-top-10-food-trends-of-2020/>

²⁹ Ibid, *About Us*.

events.³⁰ Also, nearly half of the second floor of the Flint Market is leased to Hurley Children’s Clinic, which has 35 to 40 employees and whose rental income offsets costs for the market. The Children’s clinic is home to Pediatrician Hanna-Attisha who exposed the Flint Water Crisis in 2014.

The Allen Neighborhood Center (ANC) is the “place-based, non-profit organization that serves as a hub for neighborhood revitalization and for activities that promote the health and well-being of Lansing’s Eastside community and other stakeholders.”³¹ The ANC oversees the operations and funding of The Veggie Box (multi-farm CSA), Allen Farmers Market, Hunter Park Gardenhouse (community Garden), Breadbasket Food Pantry, Incubator Kitchen Program in the “Maker Kitchen powered by Lake Trust,” Accelerator Kitchen Program, as well as several Youth programs, and the Senior Discovery Group. In 2012, the Center was 85 percent grant funded but has since reduced its grant dependency to 45 percent. In 2019, Allen Neighborhood Center Holding, LLC had the option to purchase the complex it occupied after renting it for 21 years. The ANC partnered with Cinnaire Solutions (a nonprofit for development) to raise a total of \$11 million, with Cinnaire investing \$5.9 million in the Allen Place expansion.³² The center also received \$35 Million from a new market tax credit allocation, \$1.5 million from the Michigan Strategic fund, and close to \$1 million from Eagle, a Michigan environmental group.³³

The Nashville Farmers’ Market functions as an enterprise operation, which means the goal for their department is self-sufficiency.³⁴ Maria Marton, Operations and Finance Manager at the Nashville Farmers’ Market, indicates the market operates on a \$2 million budget. Currently, revenue collected covers approximately \$1.4 million of the budget.³⁵ Nashville Farmers’ Market requests the additional funding needed to balance their budget from Metropolitan Government of Nashville and Davidson County, which is the consolidated local government serving this area.

The Chattanooga Market is operated by the non-profit Public Markets, Inc. which was established to provide healthy, fresh produce, artisan foods, and locally-produced arts and craft fares to the community and visitors.³⁶ It’s also the region’s largest producer-only marketplace offering entrepreneurs a low-cost way to start and grow their businesses. Public Markets, Inc. does not receive any government funding, relying on fees from vendors, members, and sponsors to operate.

³⁰ Phone conversation with Karianne Martus. (17 November 2021).

³¹ *Allen Neighborhood Center: Annual Report 2020*. (n.d.). Allen Neighborhood Center, p. 4. Retrieved from [https://teams.microsoft.com/_#/pdf/viewer/teams/https:~2F~2Fgseagles.sharepoint.com~2Fsites~2FWaterWorksMarketAnalysisCityofSavannah~2FShared%20Documents~2FGeneral~2FResources~2FComparison%20Facilities~2FANC%20Annual-Report-2020.pdf?threadId=19:624a2fcf6ecc4df5afa132c6eac888d6@thread.tacv2&baseurl=https:~2F~2Fgseagles.sharepoint.com~2Fsites~2FWaterWorksMarketAnalysisCityofSavannah&fileId=7bc880d6-b216-48d9-ab24-0043538000d0&ctx=files&rootContext=items_view&viewerAction=view](https://teams.microsoft.com/_#/pdf/viewer/teams/https%3A~2F~2Fgseagles.sharepoint.com~2Fsites~2FWaterWorksMarketAnalysisCityofSavannah~2FShared%20Documents~2FGeneral~2FResources~2FComparison%20Facilities~2FANC%20Annual-Report-2020.pdf?threadId=19:624a2fcf6ecc4df5afa132c6eac888d6@thread.tacv2&baseurl=https%3A~2F~2Fgseagles.sharepoint.com~2Fsites~2FWaterWorksMarketAnalysisCityofSavannah&fileId=7bc880d6-b216-48d9-ab24-0043538000d0&ctx=files&rootContext=items_view&viewerAction=view)

³² HYZNY, C. (14 September 2020). *Allen Place Project Will Provide Mixed-Income Housing and Serve as a Hub for Wide Range of Community Services*. Cinnaire. Retrieved February 2, 2022, from <https://cinnnaire.com/cinnnaire-allen-neighborhood-center-join-forces-to-revitalize-lansings-eastside/>

³³ Phone conversation with Joan Nelson. (22 November 2021).

³⁴ Email correspondence with Maria Marton. (3 March 2022).

³⁵ Ibid, Maria Marton.

³⁶ Ibid, *About Us*.

The Charleston Farmers Market was founded in 1989 with the Clemson University Cooperative Extension Service. It's operated by the City of Charleston Office of Cultural Affairs in cooperation with the City of Charleston Parks Department and Special Events Committee.³⁷

These examples provide a variety of funding and revenue options for the Water Works redevelopment team to look into. Potential local partners could include Healthy Savannah, Memorial Health, St. Joseph's Candler, Georgia Grown, and/or America's Second Harvest, all of which are focused on healthy living and/or food security. Other options for initial funding of the Water Works redevelopment are grants offered by the Georgia Department of Agriculture,³⁸ the Local Food Promotion Program with the United States Department of Agriculture (USDA)³⁹, and the Farmers Market Promotion Program also with the USDA.⁴⁰ The federal government also has several opportunities for funding innovation, community development, education, disaster relief and more that can all be found at Grants.Gov.

Education Connections

Flint Farmer's Market has many connections with educational institutions. It is directly connected with the Mott Community College Culinary Arts program that provides chef-led cooking demonstrations throughout the year. The Mott Community College Culinary Arts Facility is located near the market in Flint's Health and Wellness District, next to the MSU's School of Public Health. The Flint market provides space for the Genesee County Intermediate School District as well as Michigan State University nutrition classes that are aimed at assisting low-income families to address food insecurity, access to fresh foods and understanding how to prepare fresh healthy foods.⁴¹ The MSU Extension Master Gardener Program works closely with both the Flint and Allen Markets.

Throughout the year, the Allen Neighborhood Center receives assistance from approximately 20 interns and several hundred volunteers from neighboring Michigan State University. MSU students help with many of the outreach programs that help people navigate services and resources like healthcare access and housing assistance.

While the Nashville's Farmer Market does not have as much interaction with students as the other comparison markets, it does operate a second location at Vanderbilt University's Medical Center in partnership with Health Plus.⁴² Chattanooga and Charleston Markets do not appear to have affiliations with any institutions of higher education.

³⁷ *About*. (n.d.). Charleston Farmers Market. Retrieved from <http://www.charlestonfarmersmarket.com/about/> (accessed February 2022).

³⁸ *Grants*. (n.d.). Georgia Department of Agriculture. Retrieved from <https://agr.georgia.gov/grants.aspx>

³⁹ *Local Food Promotion Program*. (n.d.). United States Department of Agriculture. Retrieved from <https://www.ams.usda.gov/services/grants/lfpp>

⁴⁰ *Farmers Market Promotion Program*. (n.d.). United States Department of Agriculture. Retrieved from <https://www.ams.usda.gov/services/grants/fmpp>

⁴¹ *Double Up Food Bucks*. (n.d.). Flint Farmers Market. Retrieved from <https://www.flintfarmersmarket.com/about-the-market/programs-outreach>

⁴² *Overview*. (n.d.). Nashville Farmers Market. Retrieved from <https://www.nashvillefarmersmarket.org/about-the-market>

Historical significance

The facilities in the comparison group have a long history of operating a farmers' market. The Nashville Farmers' Market dates to the late 1700s when farmers brought their farm-raised goods to the heart of the City to sell. The Flint Farmers Market dates back to 1920 when it was originally located in Downtown Flint, however with congestion becoming a nuisance it was moved to the banks of the Flint River. After seventy years, it relocated to the former Flint Journal printing facility back in the heart of downtown. The Allen Neighborhood Center is the youngest of all the markets, opening in eastern Lansing in 2004.

Community Development and Place-Making

Permanent farmers' markets contribute to community building and place making. These spaces can be particularly important when they are included in plans to redevelop existing buildings. These markets are often established in either pavilions, fairgrounds, or converted industrial buildings. Converting industrial buildings appears to be the most impactful method as these buildings are often centrally located within a city, have lower construction costs, contribute to area revitalization, and are not affected by unwelcome weather conditions.⁴³

Markets established in these locations provide a new gathering point for the community and help to remove a blighted property from the neighborhood. The three comparison facilities used in this report have converted old buildings for their expanded operations. A sense of place is developed by the social atmosphere farmers' markets create as they provide a space for the community to engage, socialize, and participate in special hosted events. This helps make the "grocery shopping" experience more meaningful for residents and visitors. The social benefit of markets is just as important as the mercantile function.⁴⁴

The operational and structural models of the comparison group facilities offer a long-term roadmap for the Water Works redevelopment, but it must be acknowledged that it could take several years to achieve the same level of development. Both the Allen Neighborhood Center and Flint Farmers' Market outgrew their previous spaces, which contributed to their decisions to move into their present facilities. For example, Nashville's first market house was a 40-foot-long building established in 1802 and throughout the decades has been continuously redeveloped and renovated to what it is today.⁴⁵ Demand as well as investment from non-profit organizations contributed to the growth of both facilities and the need for additional operating space.

Place-making is a huge contributor to the success and growth of the comparison markets. For example, when the Flint Farmers' Market relocated to the old printing press in downtown Flint, foot traffic increased by 300 percent in the first year and the number of patrons walking, biking, or bussing to the market jumped from four percent to 21 percent.⁴⁶ The City of Flint has

⁴³ Ibid, Barbour, Hunter, Jones, Whiting & Wetzel.

⁴⁴ Saul, R. (13 July 2011). *The Cultural Significance of Farmers Markets*. Farmers Market Coalition. Retrieved from <https://farmersmarketcoalition.org/the-cultural-significance-of-farmers-markets/>

⁴⁵ *About: History*. (n.d.). Nashville Farmers' Market. Retrieved from <https://www.nashvillefarmersmarket.org/history>

⁴⁶ *Project for Public Spaces Public Market Experience*. (n.d.). Central Health. https://www.centralhealth.net/wp-content/uploads/2016/08/PPS-Market-Projects_UMCB-mtg.pdf

designated the area that houses the market as the Health and Wellness District. The district is anchored by Flint Farmers' Market as well as Michigan State University, and it was funded by both public and private investments.⁴⁷ Flint Farmers' Market encompasses a four-story, multi-use atrium, a community room, a rooftop terrace, and an outdoor public park and plaza in its 30,000 square foot building.⁴⁸

The Allen Neighborhood Center prides itself on being a place-based organization serving as a center for neighborhood revitalization and providing activities that promote health and wellbeing. The Center was founded in 1999, created through a collaboration of neighborhood associations in conjunction with the health system's healthy communities initiative. As such, Allen Neighborhood Center focuses on outreach and engagement and provides support to the surrounding community through resources like housing assistance (the 2nd and 3rd floors have 21 mixed income apartments), home repair resources, and enrollment assistance for healthcare options. The center has a year-round urban farming and gardening education facility, the Hunter Park Garden House, as well as the Breadbasket Food Pantry, and Veggie Box CSA. The center's newest addition is Allen Place, a mixed used development that houses the new Accelerator Kitchen (a business support program that assists with growing business' needs), the ELFCO food co-op, Ingham Health Centers Clinic, as well as additional commercial space.

It is important to note that the successes in these comparison locations were achieved through years of effort to grow those markets and expand the services offered to their vendor clients. This stepped approach is recommended for Savannah, where incremental growth takes place in the form of expanded services and facility improvements that are made as the needs of the vendors and customers grow. Considering the development of the Water Works Market will take several years to reach its full potential, the community may choose to begin offering services while the project is under development.

One possible alternative would be to use shipping containers or other temporary structures decorated with attractive exteriors to begin the placemaking and community redevelopment process with the permanent facility is constructed. These temporary structures could provide a unique experience for customers while acting as a secure space in which to leave products overnight, or to protect products in the event of inclement weather when the retail space is open for business.⁴⁹ Under this arrangement the community benefits because products are being offered in the area prior to the completion of a lengthy development process. This could hopefully maintain the momentum for this redevelopment while allowing residents to gain access to needed items in their neighborhood. See Appendix C for additional details.

⁴⁷ *Flint Health & Wellness District*. (n.d.). Michigan Economic Development Corporation. Retrieved from https://www.miplace.org/4a73a5/globalassets/documents/project-profile-pdfs/flint_health_wellness.pdf

⁴⁸ *Flint Farmers Market*. (n.d.). Project for Public Spaces. <https://www.pps.org/projects/flint-farmers-market>

⁴⁹ *Starting a Pop-Up Shop with a PODS Container*. (n.d.). PODS. Retrieved from <https://www.pods.com/business/solutions/pop-up-shops>

Incubator Assessment

Business incubators are programs that provide support services and office space to new entrepreneurs and existing businesses looking for growth opportunities. Businesses in an incubator program typically seek guidance in either starting a business or in growing their pre-existing small business. It is primarily through these services that incubators make their largest impacts, though they also act as gathering places and training centers focused on industries prevalent in the region. With hospitality and tourism being a major industry in the greater Savannah area, this analysis focuses on both general purpose and kitchen-focused incubators. Both of these forms of incubators require a lot of planning and design work to become a reality. In developing the Master Plan and Playbook for the Canal District, a key action is to repurpose the Water Works buildings as a community farmers' market and business center,⁵⁰ a space available for co-working that provides amenities such as meeting rooms, high-speed internet, and desk space as well as networking opportunities.⁵¹ The City envisions a business incubator playing a vital role in this redevelopment. One idea for the incubator was to explore the benefits and costs associated with operating a prep kitchen. This prep kitchen could take the form of a full-service kitchen incubator used by businesses who have an idea for a restaurant or food truck or for existing businesses exploring value-added food products.

Business Incubators

The team took time to analyze general business incubators as well as specialized place-based kitchen incubators. Business incubators are designed to support the growth of start-ups and small businesses by offering affordable workspaces, mentorship, education, and access to investors.⁵² General purpose incubators, which cater to a wide array of industry types, are the most common type of business incubator, with 47 percent of all incubators falling into this category. Other popular incubator designs narrow the industry focus such as technology (37 percent), manufacturing (7 percent), and service (6 percent). There is a small number of incubators that target niche markets and focus on community revitalization projects (3 percent).⁵³

Generally, business incubators are focused on creating start-ups and growing small businesses to the level that they no longer require the assistance of the incubator and can survive on their own out in the community. Entrepreneurial centers and business accelerators are terms that are often used interchangeably with business incubators though they serve different client bases. Entrepreneurial centers are focused on delivering training to individuals who are interested in becoming entrepreneurs and transitioning away from traditional roles in government, non-profit work, or the corporate sector.⁵⁴ Business accelerators, on the other hand, are competitively selective programs focused on scaling a rapidly expanding company poised for growth.⁵⁵ While

⁵⁰ Savannah Canal District: Master Plan Update. (23 April 2020).

⁵¹ Hobson, K. (14 February 2019). *What Makes a Good Business Center?* Coworking Resources. Retrieved from <https://www.coworkingresources.org/blog/what-makes-a-good-business-center>

⁵² *What is a business incubator and how does it work?* (22 May 2020). Draper University. Retrieved from <https://www.draperuniversity.com/blog/what-is-a-business-incubator>

⁵³ *Business Incubators*. (6 February 2020). Inc. Retrieved from <https://www.inc.com/encyclopedia/business-incubators.html>

⁵⁴ *Ibid, What's the Difference Between an Incubator, Accelerator, and Coworking Space?*

⁵⁵ *Ibid, What's the Difference Between an Incubator, Accelerator, and Coworking Space?*

there can be overlap between these entities as entrepreneurial and accelerator programs can run within a business incubator setting, this report will focus primarily on services and programs typically offered in a business incubator.

Incubators offer programs and resources to support clients through the business process, from ideations and hiring practices to financial planning and accounting practices. The end game is that successful businesses will eventually graduate into either an accelerator program or their own location(s). Interested parties must undergo an application process in order to join an incubator. Once an applicant has been accepted, the business owner(s) follows a schedule outlined by the incubator.⁵⁶ Participation in incubators requires a certain level of commitment, reflected in terms of both time and money. The length of incubator programs ranges from one to three years.⁵⁷

There are several benefits of participating in an incubator program as a client. Incubators are a cost-efficient way to start or grow a small business. The shared workspace carries comparable market rates per square foot but is often more affordable for startups and growing companies than renting regular office space. This is because incubator tenants share overhead costs like utilities, office equipment, computer services, conference rooms, and administrative support.⁵⁸ In addition to coaching and assistance, incubators organize business development programs for their clients that can include but are not limited to training workshops and panel discussions.⁵⁹ Even though most incubators operate as non-profits,⁶⁰ clients are still renting out the space they are using. These fees are used to fund the ongoing services offered by the incubator and as a way to ensure that clients are committed to the services offered by the incubator.

Incubators offer resources to help entrepreneurs gain access to capital through partnerships with organizations such as the Small Business Development Center (SBDC), which helps clients prepare documentation to obtain loans backed by the Small Business Administration. Incubators assist clients in pitching to angel investors and preparing presentations for venture capitalists.⁶¹ Incubators offer an informal space for entrepreneurs to network and collaborate with a community of like-minded individuals and they can host networking events like the Kauffman Foundation's 1 Million Cups program where entrepreneurs and community members gather to share best practices and solve problems.⁶²

The incubator concept has proven to be an effective way to grow a business community either by developing an area of the economy that is lagging behind or enhancing an existing industry already growing in the host community. For example, the City of Charleston launched their first Flagship incubator in 2009 in an effort to promote Charleston's tech economy and support the development of high-wage jobs.⁶³ The first Flagship building was 5,200 square feet. Flagship2

⁵⁶ *Business Incubators: Pros and Cons*. (n.d.). Accion Opportunity Fund. Retrieved from <https://aofund.org/resource/business-incubators-pros-and-cons/>

⁵⁷ *Ibid*, *Business Incubators*, Inc.

⁵⁸ *Ibid*, *Business Incubators*

⁵⁹ *Ibid*, *Business Incubators: Pros and Cons*.

⁶⁰ *Ibid*, *Business Incubators*

⁶¹ *Ibid*, *Business Incubators*

⁶² *About 1 Million Cups*. (n.d.). 1 Million Cups. Retrieved from <https://www.1millioncups.com/about>

⁶³ *Flagships History*. (June 2020). Charleston Digital Corridor, Accelerating Charleston's Tech Economy.

launched in 2011 in a 13,700 square foot building in downtown Charleston funded by the City of Charleston and state of South Carolina. These two facilities graduated 144 companies which raised over \$270 million in funding from public and private sources and created over 1,500 jobs.⁶⁴

Kitchen Incubators

Kitchen incubators provide similar business support to general purpose incubators (e.g., consulting, networking opportunities, affordable workspace), the difference being that kitchen incubators typically offer a shared-use kitchen facility for food entrepreneurs to create their products. The type of equipment available at a kitchen incubator varies, but most have refrigerators, convection ovens, prep tables, sinks, gas stoves and/or griddles, mixers, freezer, shelves, and utility carts.⁶⁵ Because leasing or purchasing a restaurant and kitchen equipment is expensive, kitchen incubators allow small food businesses to test menus and operations to start and grow their businesses without paying for these costs upfront. Kitchen incubator clients often produce ready-to-eat foods, baked foods, mobile vending food, and other specialty products.⁶⁶

If a shared-use kitchen is part of the final design of the Water Works Market, then the City will have to determine what kind of shared-use kitchen will be best used in this space. There are several varying designs of a shared-use kitchen.

- Shared Commercial Kitchen – Commercial kitchens are typically rented by the hour. Clients are often required to pay for a monthly minimum number of hours and have to sign up for times in the kitchen. Storage space is available at additional cost. Typical clients include food trucks, pop-up kitchens, small batch food production, and catering companies.⁶⁷
- Private Commissary Kitchen – Private kitchens are generally the most expensive type because clients have exclusive access to all or a specified portion of the facility. These kitchens are good for mobile vendors with multiple units who need a central production facility. They are also appropriate for ghost kitchens.⁶⁸
- Ghost Kitchen – Sometimes referred to as a black box kitchen, ghost kitchens are designed for delivery only restaurants. Sometimes these businesses have their own drivers, but it is common that they utilize food delivery companies (e.g., DoorDash, UberEats, etc.). Ghost kitchens can be shared-use or private kitchen facilities.⁶⁹
- Community Kitchen – These kitchens are located in non-traditional facilities, often non-profits, such as churches, community centers, and charter schools.¹⁷ Community kitchens

⁶⁴ Ibid, Flagships History.

⁶⁵ *U.S. Kitchen Incubators: An Industry Update*. (January 2020). Econsult Solutions Inc., Urbane Development, The Food Corridor, Catherine Street Consulting. Retrieved from https://econsultsolutions.com/wp-content/uploads/2020/01/Kitchen-Incubators-2019_1.14.20.pdf

⁶⁶ Ibid, *U.S. Kitchen Incubators: An Industry Update*.

⁶⁷ *What is a Commissary Kitchen?* (29 June 2021). Webstaurant Store. Retrieved from <https://www.webstaurantstore.com/article/259/commissary-kitchens.html>

⁶⁸ Ibid, *What is a Commissary Kitchen?*

⁶⁹ McCauley, C. (n.d.). *What is a Commissary Kitchen?* Webstaurant Store. Retrieved from <https://www.webstaurantstore.com/blog/2348/what-are-ghost-restaurants.html>

usually service community building activities, part-time caterers, side hustles, and home-based entrepreneurs. Community kitchens are usually not suitable for larger commercial clients, generating innovative solutions, or expanding business footprints.⁷⁰

- Co-packing – Co-packing companies assist food entrepreneurs with the food products. They manufacture, process, and package food products for businesses, which allows more time for entrepreneurs to conduct other business tasks such as product development and marketing. Co-packing companies are a popular income-generating activity for many shared-use kitchens.⁷¹

The type of kitchen incubator to be used should be decided in tandem with identifying targeted clientele. While shared-use kitchens typically have standard equipment, as previously listed, some kitchens will require specialty equipment for their clients. Examples of specialty equipment could include canning, bottling, or packaging.

The three major comparison facilities exemplify kitchen incubator space and operations. Nashville Farmers' Market has a kitchen incubator inside the Market House, called Grow Local Kitchen, which provides a commercial kitchen, retail space, and educational space for food entrepreneurs. Ten participants are selected on an annual basis to participate in the incubator program, but other businesses can rent kitchen space as well. The Nashville Farmers Market also has a greenhouse and container farm located between its two farm sheds⁷² and offers monthly chef-led cooking demonstrations and community workshops.

The Allen Neighborhood Center's market has three shared use commercial kitchens that support nutrition education, culinary job skill training, food entrepreneurship, and cooking classes. Allen Market Place also has a Wash-Pack Kitchen with cool and dry storage. Their Kitchen Incubator Program uses these facilities to provide affordable hourly rental and business development support for entrepreneurs. The program has assisted over 56 entry-level food entrepreneurs, and its growth has led to the implementation of an accelerator kitchen in 2020. The Next-Step Accelerator Kitchen opened in 2020 to allow graduates of the Kitchen Incubator Program to take residence with access to dedicated prep and storage space as well as new storefronts on the block.⁷³

Flint Food Works is roughly 2,400 square feet of kitchen and storage space. Culinary Director, Sean Gartland has explained that they charge a flat hourly rate to users, so that managers can gain an idea of how much it costs to operate a kitchen. The program offers new, prospective businesses, traditional incubator-provided services like one-on-one counseling, assistance in obtaining proper licensing, business planning seminars, and program curriculum licensed

⁷⁰ Lowitt, K. (May 2011). Community Kitchen Best Practices Toolkit: A Guide for Community Organizations in Newfoundland and Labrador. Retrieved from https://www.foodsecuritynews.com/Publications/Community_Kitchen_Best_Practices_Toolkit.pdf

⁷¹ *Food Co-packer vs. Commercial Kitchen Costs for Small Businesses*. (19 January 2021). Amped Kitchens. Retrieved from <https://www.ampedkitchens.com/resources/2021/1/19/food-co-packer-vs-commercial-kitchen-costs-for-small-businesses>

⁷² *Merchants In the Nashville Farmers' Market Sheds*. (n.d.). Nashville Farmers Market. Retrieved November 20, 2021, from <https://www.nashvillefarmersmarket.org/nfmmerchants>

⁷³ *ANC Annual Report 2020*. (2020). Allen Neighborhood Center. <http://allenneighborhoodcenter.org/wp-content/uploads/2021/04/Annual-Report-2020.pdf>

through Co.Starters, a company that designs programs that grow local small businesses.⁷⁴ Gartland also explained that they give tours to students and host informational meetings on food entrepreneurship.

Kitchen incubators have the potential to help businesses and entrepreneurs thrive. In order to create an environment that ensures the success of both the incubator and its clients, certain management practices are recommended. Implementing proper policies, procedures, and safeguards can guarantee a secure and cooperative atmosphere. In a shared-use kitchen facility, policies for user and service providers should outline the expectations for both parties. Some of the best practices in the industry include:

- Food Safety Procedures – To ensure the cleanliness of kitchens by health inspection standards, there should be clear policies in place that address maintenance, equipment cleaning, and management procedures.
- Develop a supportive and inclusive atmosphere- Facility operators must work to build on connections with experienced mentors with industry experts, regulators, consultants, and funders.⁷⁵ This network should be representative of all segments of the community.
- Protection Guidelines – It needs to be determined what kinds of food production businesses and products will be permitted in the commercial kitchen space. Because of allergies, procedures for proper storage of products and cleaning, as previously mentioned, should be implemented.
- Ongoing Training – Clients should be offered training at the startup and second stage points of the business development process. The training should include business management, go-to-market strategies, product development, branding, etc.⁷⁶ Training on the kitchen equipment should also be offered at regular intervals.
- Robust Scheduling System – Scheduling software is necessary for creating and organizing kitchen use scheduling.⁷⁷
- Monitored Access – An access tracking system would assist with tracking clients' usage of facility spaces as well as limit access to specified areas. Replacement procedures for items such as access cards or key fobs would need to be established. Ideally, an access system would work in concert with a scheduling system.

⁷⁴ Meet CO.STARTERS. (n.d.). CO.STARTERS. Retrieved from <https://www.costarters.co/about>

⁷⁵ *The Shared-Use Kitchen Planning Toolkit*. (September 2014). Leopold Center, Iowa State University. Retrieved from <https://www.leopold.iastate.edu/files/pubs-and-papers/2014-09-shared-use-kitchen-planning-toolkit.pdf>

⁷⁶ Ibid; Leopold Center.

⁷⁷ Ibid; Leopold Center.

Pros & Cons of Business Incubators

In addition to the support services and affordable workspace, business incubators provide other important benefits. With multiple, diverse businesses operating in the same building and sharing resources, the environment fosters strong inter-client relationships through which business owners can provide encouragement and share ideas for new strategies.⁷⁸

General purpose business incubators create lasting impacts in their communities when successful, while kitchen incubators are a huge support for food entrepreneurs with limited resources and knowledge. Additionally, they make great impacts on their local communities through job creation, workforce training, education, localizing the food economy, and neighborhood revitalization efforts.⁷⁹ Business incubators benefit their communities and drive economic growth by spurring job creation. This can lead to more experienced mid-career personnel, and veteran executives being present in a community which can increase the human capital in the area.⁸⁰

Business incubators are also not without some of their own challenges. One such challenge is creating the best environment that accomplishes what incubators are designed to do, grow small businesses.⁸¹ An incubator that succeeds in this area offers more than just cheap rental space and shared resources. They also have a quality curriculum. Well-designed incubator programs help businesses achieve market opportunity and a marketable product.⁸² Another challenge is to avoid fixating on is capital access. While capital access is an important, it's not the entire measure of success for startups. Most new businesses should grow organically and become self-sufficient.⁸³ This is what business incubators are supposed to foster. Incubator sustainability has been linked to high business survival rates and high job creation.⁸⁴

One challenge kitchen incubators experience is sustainability and revenue generation. As stand-alone facilities, about 39 percent of shared-use kitchen incubators generate a profit, 34 percent break even, and 27 percent lose money.⁸⁵ The success of kitchen incubators partially depends on the facility's flexibility in its role and mission. For example, newly established incubators often focus on sustainable revenue generation and servicing a particular customer. However, economic developers have learned to adapt their goals to meet the needs of the local community and those interested in the incubator. In order to be successful these incubators may shift their primary focus away from revenue generation or serving a specific client and instead focus on investing in

⁷⁸ *The Importance of Business Incubators*. (10 December 2020). Chron. Retrieved from <https://smallbusiness.chron.com/importance-business-incubators-34079.html>

⁷⁹ *Ibid*, *U.S. Kitchen Incubators: An Industry Update*.

⁸⁰ *Ibid*, *The Importance of Business Incubators*

⁸¹ Al-Mubarak, H.M., and Busler, M. (24 July 2017). Challenges and opportunities of innovation and incubators as a tool for knowledge-based economy. *Journal of Innovation and Entrepreneurship*. 6(15). DOI: <https://doi.org/10.1186/s13731-017-0075-y>

⁸² Mitra, S. (26 August 2013). *The Problems with Incubators, and How to Solve Them*. Harvard Business Review. Retrieved from <https://hbr.org/2013/08/the-problems-with-incubators-a>

⁸³ *Ibid*, Mitra

⁸⁴ *Ibid*, Al-Mubarak and Busler

⁸⁵ *Ibid*, Huang, L. et al.

the right equipment to serve the needs of parties most interested in the space or add community-based programs.⁸⁶

A kitchen incubator with the appropriate commissary kitchen has the potential to support a niche in the City of Savannah: food trucks. Food truck businesses operating in the City of Savannah can only do so at temporary events with the proper permits. Food truck operators desiring to work long-term in Savannah are required to have a base of operation located within the city. Jack Jackson runs a ghost kitchen in Savannah. Jackson uses the kitchen for his own food truck business, 6 Gear CheeseSteak Factory, and provides yearly leases to food entrepreneur tenants.⁸⁷ While Jackson's ghost kitchen offers space and resources to food entrepreneurs, it is lacking critical, more expensive equipment. Jackson agrees that there is a need for a full-fledged commissary kitchen to service the City's food entrepreneurs. He said that his kitchen is usually busy, however many new restaurants fail as they lack the resources beyond the space to help them be successful. A kitchen incubator with entrepreneurial programming and experts could help fill these gaps.

Kareem Hill, Director for Pennsylvania Avenue Resource Center (PARC), relays a similar message regarding the establishment of a kitchen incubator.⁸⁸ The PARC offers daily programming, including business support, aiming for two to three culinary programs each month to target three age groups; youth, adults, and seniors. Hill explains the PARC has a state-of-the-art culinary kitchen utilized for programming and certified classes. A multipurpose room in the center is available for rent, but renters have access to the prep kitchen only. The PARC offers a lot of assistance to its members, who currently must apply to become a member, but are not required to pay a membership fee. Hill explains there are many culinary entrepreneurs who don't have access to a commercial kitchen and also need on the ground business coaching. He routinely receives requests for these services from potential clients but because that does not fit the mission of PARC, he must turn them away.

⁸⁶ *U.S. Kitchen Incubators: An Industry Update*. (January 2020). Econsult Solutions Inc., Urbane Development, The Food Corridor, Catherine Street Consulting. Retrieved from https://econsultsolutions.com/wp-content/uploads/2020/01/Kitchen-Incubators-2019_1.14.20.pdf

⁸⁷ Phone conversation with Jack Jackson. (15 December 2021).

⁸⁸ Phone conversation with Mark Kareem. (11 March 2022).

Savannah Area Retail and Food Services Market Analysis

To build on the comparative analysis the team next examined secondary data that represents current economic activities in this market. The data focuses on the retail and restaurant industry in the Savannah area. The North American Industry Classification System (NAICS) is the standard used by Federal statistical agencies in classifying business establishments for the purpose of collecting, analyzing, and publishing statistical data related to the U.S. business economy.⁸⁹ This assessment uses Retail Industry (NAICS 44 through 45) and food services and drinking places industry (NAICS 722). For these two industries, the team starts with a general economic analysis, which is then used to create a retail gap analysis. The team analyzes two separate geographic areas.

Retail and Food Services Industry

The team begins by analyzing the relative importance of this industry to the community retail and food services industry. The team uses a location quotient which measures the relative size and level of specialization present in a targeted industry in a regional economy when it is compared to a larger region. In this case Chatham County and the City of Savannah are compared to the state of Georgia. An LQ score of 1 shows that the industry is the same size as the comparison region. A score that is higher than 1 indicates that the industry is outperforming the state, and a score of less than 1 indicates the industry is relatively smaller than the state being measured. Table 3 displays location quotient. A comprehensive listing by individual NAICS codes can be found in Appendix D. In this table the location quotient scores are based on a comparison to the state of Georgia using employment.

Industry NAICS Category	Chatham		Savannah	
	2016	2020	2016	2020
Retail Trade (44)	1.13	1.14	1.15	1.14
Motor Vehicle & Parts Dealers (441)	1.35	1.37	1.40	1.44
Furniture and Home Furnishings Stores (442)	1.28	1.59	1.57	1.82
Electronics & Appliance Stores (443)	1.05	1.55	1.27	1.62
Building Materials & Garden Equipment Dealers (444)	1.10	1.07	1.03	0.96
Food & Beverage Stores (445)	1.08	1.08	1.03	1.02
Health & Personal Care Stores (446)	0.89	1.02	1.02	1.08
Gasoline Stations (447)	1.18	1.26	0.84	1.05
Clothing & Clothing Accessories Stores (448)	1.61	1.74	1.65	1.68
Sporting Goods, Music Instrument, & Book Stores (451)	1.23	1.17	1.53	1.32
General Merchandise Stores (452)	1.09	0.97	1.10	1.01
Miscellaneous Store Retailers (453)	1.09	1.09	1.32	1.26
Non-store Retailers (454)	0.31	0.47	0.28	0.37
Food Services & Drinking Places (722)	1.47	1.43	1.55	1.52
Special Food Services (7223)	0.82	0.91	0.92	1.02
Drinking Places (Alcoholic Beverages) (7224)	0.94	1.32	1.22	1.62
Restaurants & Other Eating Places (7225)	1.54	1.47	1.61	1.56

Source: JobsEQ

⁸⁹ North American Classification System (2022). Retrieved from <https://www.census.gov/naics/> (accessed 1 April 2022).

Within Chatham County and the City of Savannah, the retail market has several sectors that stand out as particularly important. Two of these industries include Furniture and Home Furnishings Stores (442) and Electronics and Appliance Stores (443). These industrial sectors largely serve the local population due to the nature of the goods sold at the businesses included in this section. As a group, these sectors have increased their LQ scores between 2016 and 2020. This means that these industrial sectors are becoming a more valuable part of the retail market when compared to other industries in this market.

While meeting local demand for goods and services is an important part of the retail industry, another important driver of growth is visitor spending. The team next looks at industries that serve both the visitors and residents, including Clothing and Clothing Accessories Stores (NAICS 448), Miscellaneous Store Retailers (NAICS 453), and Food Services and Drinking Places (NAICS 722). Clothing stores and food services cover many of the boutiques and restaurants located in historic downtown Savannah. Miscellaneous retailers cover a wider array of businesses. The sectors covered in the miscellaneous store retailers include gift stores and art dealers as well as florists and pet supplies stores. Taken together, a great deal of tourism-related spending is included in these three industrial sectors.

An examination of their location quotient scores reveals that Clothing and Clothing Accessories Stores (NAICS 448) and Miscellaneous Store Retailers (NAICS 453) have both experienced a slight increase in their scores while Food Services and Drinking Places (NAICS 722) has slightly declined. Some of these changes are linked to the COVID-19 pandemic which impacted the 2020 data. The restaurant industry was largely impacted by the pandemic as customers stopped dining away from home. One positive aspect of the local industry is that its overall importance has not dramatically changed since 2016. This means that consumers are still purchasing some of these goods locally and that the widespread impact from COVID-19 is mostly temporary.

Taken together, the retail and food services industries are an important part of the regional economy in Savannah. Based on the LQ scores, this segment of the economy is more important to Chatham County and the City of Savannah than it is to the statewide industry. Although this regional value does not make the local market immune from the impacts of COVID-19 nor the changing way consumers are shopping, it does mean that this area could be more resilient. The community has the human and financial capital as well as the market demand for these industries due to tourism. It also has the population growth that can support new businesses. In addition, areas with greater levels of economic specialization can create a workforce and supply chains that serve this specialization which can strengthen the overall industry, making it more resilient and attractive to new entrants.

While location quotients are an important comparative tool, examining the underlying employment levels can provide additional insight into the performance of the retail and food services market. Businesses will typically expand their employment when demand is strong and when revenues are increasing. Therefore, increasing levels of employment are a good sign that the current market conditions in the area are in a state of expansion, potentially making it a good time to add businesses to the industry.

This typical interpretation of expanding employment is partially impacted by the COVID-19 pandemic. During 2020 some employees were furloughed or let go due to the lack of demand. As these companies started to rehire or replace these employees, it is possible that retailers are only just returning their businesses to their pre-pandemic foundations. To account for this possibility the research team uses a five-year employment trend. The complete year-over-year trend is available in Appendix D and the abbreviated comparison is displayed in Table 4.

Table 4: Employment						
	Chatham County			City of Savannah		
	2016	2019	2020	2016	2019	2020
Total retail trade incl. food & drink (NAICS 44, 45 & 722)	36,896	38,054	34,128	24,369	24,550	21,898
Retail Trade (44)	19,281	19,782	18,980	12,566	12,431	11,813
Motor Vehicle & Parts Dealers (441)	2,835	2,992	2,844	1,876	1,957	1,874
Furniture and Home Furnishings Stores (442)	638	915	717	497	642	511
Electronics & Appliance Stores (443)	569	561	738	439	395	479
Building Materials & Garden Equipment Dealers (444)	1,463	1,464	1,574	867	821	882
Food & Beverage Stores (445)	3,505	3,486	3,648	2,121	2,070	2,153
Health & Personal Care Stores (446)	1,016	1,160	1,133	749	767	746
Gasoline Stations (447)	1,128	1,163	1,253	511	602	650
Clothing & Clothing Accessories Stores (448)	2,333	2,361	1,922	1,531	1,420	1,156
Sporting Goods, Music Instrument, & Book Stores (451)	818	729	622	649	519	438
General Merchandise Stores (452)	3,668	3,367	3,111	2,370	2,209	2,006
Miscellaneous Store Retailers (453)	1,036	1,123	961	799	798	690
Non-store Retailers (454)	274	463	457	156	231	229
Food Services & Drinking Places (722)	17,615	18,272	15,148	11,803	12,119	10,085
Special Food Services (7223)	670	722	582	476	504	409
Drinking Places (Alcoholic Beverages) (7224)	383	414	403	318	313	309
Restaurants & Other Eating Places (7225)	16,562	17,137	14,164	11,009	11,301	9,367

Source: JobsEQ

Over the five-year timeframe being analyzed, both Chatham County and the City of Savannah have witnessed a decline in the average annual growth rate for the combined retail and food services industry. The average annual rate for Chatham County declined by 2.1 percent, and for the City of Savannah it declined by 2.8 percent. This decline in employment is linked to the COVID-19 pandemic. The team has computed the same statistics for 2016 through 2019 which reveals that retail and food services employment increased by 3.1 percent for Chatham County and 0.7 percent for the City of Savannah. This shift in employment prior to the pandemic was driven by slow growth in the Food Services sector in the City of Savannah.

Following the national trends, the local retail industry has maintained its employment levels better than the food services industry. From 2016 to 2020 the retail industry declined by 0.4 percent in Chatham County and 1.9 percent in the City of Savannah. One bright spot is the Furniture and Home Furnishings and Stores (NAICS 442) and Electronics and Appliance Stores (NAICS 443). Employment in these two industries increased in both Chatham County and the City of Savannah during this five-year period. In Chatham County this combined sector grew from 1,207 total jobs in 2016 to 1,455 in 2020, yielding an annual growth rate of 4.4 percent. In the City of Savannah this combined sector started at 936 total jobs in 2016 and it increased to 990 jobs in 2020, meeting the average annual growth rate of 1.2 percent over this timeframe.

This is counter to the national trend in the Furniture and Home Furnishings and Stores industry which declined by 2.5 percent and Appliance Stores which contracted by 3.2 percent over this same timeframe.

In contrast, the Clothing and Clothing Accessories Stores (NAICS 448) and Miscellaneous Store Retailers (NAICS 453) both lost jobs between 2019 and 2020. Clothing stores in both Chatham County and the City of Savannah declined by 22.8 percent while miscellaneous store retailers decreased by 16.9 percent in Chatham County and 15.7 percent in the City of Savannah. For these two industries the local area in line with national trends which decreased by 5.6 percent and 2.2 percent respectively. In the United States Clothing and Clothing Accessories Stores This was the largest single year-over-year decline for the five-year timeframe. Over this timeframe the clothing store experienced decreasing employment in other year-over-year periods which led to an average annual decline of 5.4 percent for Chatham County and 7.6 percent in the City of Savannah. This indicates that COVID-19 may have influenced the overall change in employment, but it is not the only factor impacting this industry. The change in employment in the miscellaneous stores category is linked to the year-over-year movement between 2019-2020. On an average annual basis, the miscellaneous stores' employment declined 2.2 percent in Chatham and 4 percent in the City of Savannah. Without this one year the overall trend would be about the same.

The food services industry declined in Chatham County between 2019 and 2020 by 20.6 percent or 3,124 jobs and in Savannah by 20.2 percent or 2,034 jobs. This one year turned the five years average annual growth rate negative with Chatham County employment decreasing by 4.2 percent and the City of Savannah employment decreasing by 4.4 percent. The overall decline in this sector is solely related to the hesitancy of local diners to return to restaurants and the changes in the tourism market related to COVID-19. It is likely that as COVID-19 concerns continue to ease, this industry should return to its pre-pandemic growth trends.

It is important to note that the industrial sectors with larger comparative values are not always the largest in employment trends. By comparing these two factors it is possible to find sectors that are comparatively larger but are not significant contributors to overall employment. In this case, the Water Works building is well place to support businesses in the miscellaneous stores and food services industries. Additionally, the food and beverage stores trends are solid, but these stores are not leaders in the retail industry in LQ or employment terms. One final test of the current existing retail industry is to examine the number of establishments in this area.

Due to data availability issues, only Chatham County data is included in this analysis. Establishments data focuses on the different locations of businesses in the community. For example, it is possible to have three locations for a donut shop in a community. If these shops are owned by one person, they are commonly considered one business. Within the establishment definition this one business becomes three establishments due to the three standalone locations. The team has included all five years in Table 5 for this variable.

Table 5: Establishments in Chatham County					
	2016	2017	2018	2019	2020
Total retail trade incl. food & drink (NAICS 44, 45 & 722)	9,449	8,810	8,793	9,016	9,617
Retail Trade (44)	8,654	8,033	8,008	8,210	8,764
Motor Vehicle & Parts Dealers (441)	1,296	1,229	1,220	1,231	1,297
Furniture and Home Furnishings Stores (442)	123	119	123	121	124
Electronics & Appliance Stores (443)	65	59	58	64	65
Building Materials & Garden Equipment Dealers (444)	53	46	43	37	40
Food & Beverage Stores (445)	61	58	57	57	64
Health & Personal Care Stores (446)	169	162	170	167	175
Gasoline Stations (447)	131	131	125	127	140
Clothing & Clothing Accessories Stores (448)	162	154	149	155	172
Sporting Goods, Music Instrument, & Book Stores (451)	227	217	204	204	214
General Merchandise Stores (452)	62	57	58	57	57
Miscellaneous Store Retailers (453)	78	72	73	75	76
Non-store Retailers (454)	148	136	132	137	141
Food Services & Drinking Places (722)	795	777	785	806	853
Special Food Services (7223)	35	29	30	34	39
Drinking Places (Alcoholic Beverages) (7224)	45	45	44	45	51
Restaurants & Other Eating Places (7225)	715	703	710	727	763

Source: JobsEQ

First, it is important to note that the retail industry has seen an increase in establishments during 2020.⁹⁰ This is likely due to people employed within the industry looking for new opportunities and individuals from other professions choosing to open a business.⁹¹ There are many factors that drive this type of countercyclical development. Many individuals could be choosing to chase their dream while others are becoming entrepreneurs out of necessity due to job loss. Either pathway may result in the successful development of a new business and the opening of new business locations. The Savannah area has been growing in both economics and population for the past 20 years, which can attract new or expanding businesses.

For 2016 to 2020 the combined retail and food services industry grew by 0.3 percent or 42 establishment on an average annual basis in Chatham County. The food services industry outgrew the retail industry by reaching 1.7 percent or 28 establishments on an average annual basis while the retail industry increased by 0.2 percent or 15 establishment annually. Despite the slow growth, only the Building Materials sector in the retail industry declined by more than 6 percent over this timeframe while the fastest growing industrial sector was Gasoline Stations at

⁹⁰ Caselman, B. (17 February 2021) *Surge in start-ups is a surprise in the pandemic economy*. The New York Times. Retrieved from <https://www.nytimes.com/2021/02/17/business/pandemic-entrepreneurs.html>

⁹¹ Massenger, H. (14 September 2021) *Entrepreneurship during economic uncertainty: Why millions of people started a business during the pandemic*. NBC News, Business News. Retrieved from <https://www.nbcnews.com/business/business-news/entrepreneurship-during-economic-uncertainty-why-millions-people-started-business-during-n1279063>

1.5 percent annually. The remaining changes across this market were all modest on a percentage basis. This degree of stability could make it possible for new entrants to join the market and have initial and long-lasting success.

These variables illustrate that Savannah has a strong and vibrant retail and food services industry. This segment of the local economy provides a vital source of employment for the region. Although 2020 did have some negative effects, it did not change the makeup of the local economy using location quotients while the number of establishments increased during this year. This stability demonstrates that investment in programs or services that support the retail and food service industry is adding to an existing industry with a solid tie to the region. The Water Works redevelopment could add to this base through the farmers market, food hall, and the programs or services offered to entrepreneurs.

Retail Gap

Another factor that drives the retail market is the amount that consumers are willing to spend on goods and services. One common way to analyze consumer spending is with a retail gap analysis. A gap analysis examines the amount of goods being demanded by residents of a geographic area compared to the amount of goods that retailers are selling. When residents are spending more at local retailers than is being supplied, a retail gap is present. In contrast, when retailers are supplying more than residents are buying the retail industry is in a state of surplus. Knowledge of the retail gap can help to guide the decision-making process of stakeholders in these industries.

Retail gap analyses do not always follow political boundaries because retail spending often shifts based on both proximity of the desired retailer and type of goods being sought by the potential customer. For example, consumers are willing to travel longer distances to purchase expensive items like cars but shorter distances to buy necessities such as groceries or household cleaning products. This means that most consumers frequent retailers that are within a limited geographic area. To address this condition in the marketplace the team has selected a one-, two- and three-mile radius distance area surrounding the Water Works building for the retail gap area.⁹² This allows the team to analyze the amount for local retail spending available to support the project without relying on individuals attending an event at the Enmarket arena.

The first retail gap focuses on the one-mile radius distance area surrounding the Water Works building. Within this area the total population is 13,869 which includes 4,581 households. The estimated median income in 2022 is \$30,796 while the average income is \$56,069. This illustrates that there is a wide level of income disparities within one mile of the Water Works building.⁹³ A brief overview of the gap analysis findings is available in Table 6, and the complete gap analysis is presented in Appendix D.

⁹² Turkin, T. (n.d.). *How Far Customers Are Willing to Travel to Spend Money*. Indoor Media. <https://www.indoormedia.com/blog/how-far-customers-are-willing-to-travel-to-spend-money>

⁹³ Claritas. (February 2022). *Pop-Facts® Demographic Household Quick Facts 2022*.

Table 6: One-mile Radius Distance from Water Works Building

	Demand (\$)	Supply (\$)	Opportunity Gap/Surplus (\$)
Total retail trade incl. food & drink (NAICS 44, 45 & 722)	159,750,419	180,749,012	-20,998,593
Retail Trade (44)	143,784,237	153,312,477	-9,528,241
Motor Vehicle & Parts Dealers (441)	35,130,440	26,585,757	8,544,684
Furniture and Home Furnishings Stores (442)	2,269,311	7,596,090	-5,326,779
Electronics & Appliance Stores (443)	1,814,349	1,872,467	-58,118
Building Materials & Garden Equipment Dealers (444)	10,135,299	20,649,399	-10,514,101
Food & Beverage Stores (445)	21,170,761	39,479,013	-18,308,251
Health & Personal Care Stores (446)	9,108,345	6,072,173	3,036,172
Gasoline Stations (447)	12,471,396	13,300,967	-829,571
Clothing & Clothing Accessories Stores (448)	4,924,753	7,776,639	-2,851,886
Sporting Goods, Music Instrument, & Book Stores (451)	1,672,001	2,689,649	-1,017,647
General Merchandise Stores (452)	18,262,755	21,016,316	-2,753,561
Miscellaneous Store Retailers (453)	3,013,499	4,295,270	-1,281,771
Non-store Retailers (454)	23,811,327	1,978,739	21,832,588
Food Services & Drinking Places (722)	15,966,182	27,436,534	-11,470,352
Special Food Services (7223)	1,285,755	2,483,247	-1,197,491
Drinking Places (Alcoholic Beverages) (7224)	439,577	0	439,577
Restaurants & Other Eating Places (7225)	14,240,850	24,953,288	-10,712,438

Source: Claritas Retail Stores Opportunity Gap 2022

With these broader categories, only two sectors defined by the North American Industry Classification System for statistical purposes have a gap, Health and Personal Care Stores (NAICS 446) and Nonstore Retailers (NAICS 454). Within these wider sectors the retail gap analysis indicates that there are limited opportunities to capture more local demand for goods and services because the remaining sector is in surplus. Although a closer look at several of the supporting sectors tell a somewhat different story. Within the Food and Beverage Stores (NAICS 445) industry, Grocery Stores (NAICS 44511) are meeting \$36.6 million of the \$39.5 million of total supply. However, the area is not capturing \$486,000 in demand for meat markets, fruit and vegetables markets, and other specialty food stores. This is important because it illustrates that there is room in the food and beverage stores industry for growth based on local demand before the team focuses on the low income and low food access geographies. This fits with some of the discussions the research team had with nearby residents who noted that they cannot find fresh food in their neighborhood and must travel out of it to buy groceries. This gap analysis helps explain why it is difficult to attract more food retailers to the greater westside area. From the gap analysis perspective, this area appears to already be well served by retailers.

When the research team expands the distance from the Water Works building, the market size increases. At the two-mile distance the total population is 39,341 and there are 15,524 households. At the three-mile distance the total population and households increase to 64,387 and 25,765, respectively. This growth in population and households is followed by similar increases in the income variables used by the research team. Within the two-mile radius, median income is \$36,612 and the average income is \$65,668. When the radius distance is expanded to three-miles, median income grows to \$41,686 and average income increases to \$67,867. This information demonstrates that including residents living further away from the Water Works building could increase the potential market for this development. This conclusion is further illustrated by the two-mile and three-mile radius distances opportunity gap displayed in Table 7.

Table 7: Two- and Three-mile Radius Distance from Water Works Building Opportunity Gap/Surplus (\$)

	2-mile Radius	3-Mile Radius
Total retail trade incl. food & drink (NAICS 44, 45 & 722)	-757,615,424	-781,844,111
Retail Trade (44)	-543,874,310	-555,891,302
Motor Vehicle & Parts Dealers (441)	-15,294,654	-38,334,270
Furniture and Home Furnishings Stores (442)	-36,596,309	-34,863,594
Electronics & Appliance Stores (443)	-25,183,308	-22,682,590
Building Materials & Garden Equipment Dealers (444)	-33,708,228	-41,821,061
Food & Beverage Stores (445)	-139,086,808	-181,832,080
Health & Personal Care Stores (446)	-13,276,391	-16,775,088
Gasoline Stations (447)	-30,292,595	-28,576,551
Clothing & Clothing Accessories Stores (448)	-91,505,177	-85,868,636
Sporting Goods, Music Instrument, & Book Stores (451)	-32,328,245	-31,765,795
General Merchandise Stores (452)	-69,005,663	-72,611,042
Miscellaneous Store Retailers (453)	-46,745,381	-43,856,531
Non-store Retailers (454)	-10,851,552	43,095,936
Food Services & Drinking Places (722)	-213,741,114	-225,952,809
Special Food Services (7223)	-24,195,763	-25,419,234
Drinking Places (Alcoholic Beverages) (7224)	-1,923,951	-771,488
Restaurants & Other Eating Places (7225)	-187,621,400	-199,762,088

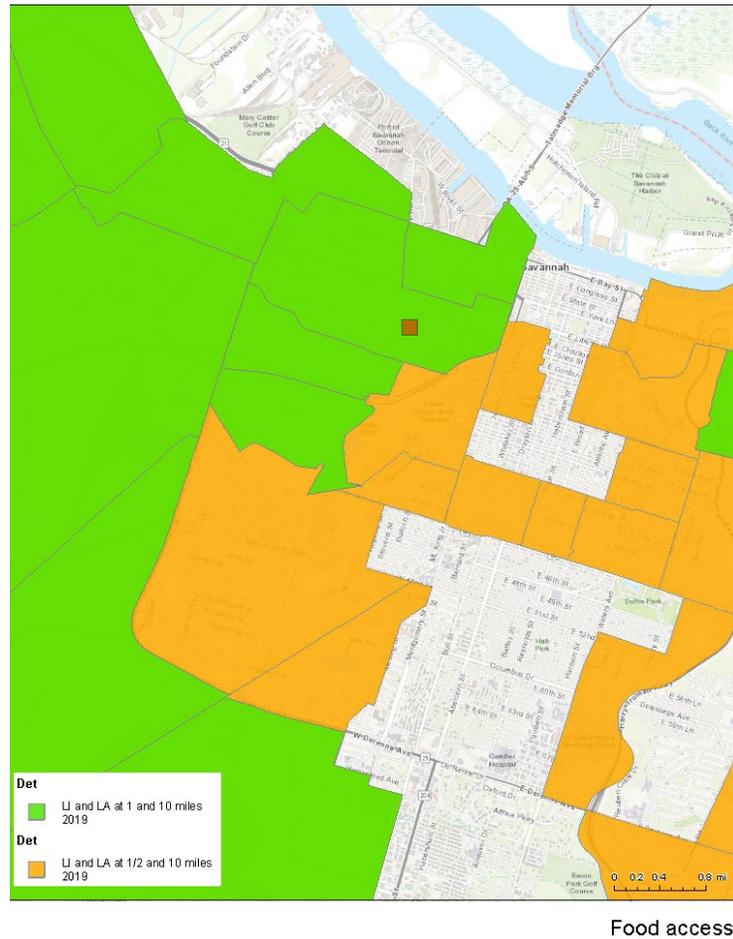
Source: Claritas Retail Stores Opportunity Gap 2022

This abbreviated gap analysis illustrates that the market is in a state of surplus across each of the listed sectors. These surpluses are significant with the two-mile surplus reaching \$758 million and the three-mile surplus hitting \$782 million. These surpluses are driven by the large number of visitors frequenting this area. These visitors are both out of town tourists and locals who are commuting into the City of Savannah for work. Both groups are choosing to spend some of their income within this area. Although these surpluses are not unexpected, the overall size illustrates that this area is a destination and that a new permanent or year-round farmers’ market must work to meet local neighborhood needs while still accommodating the wider market.

Within the local neighborhood there is a need for quality products at affordable prices. The Water Works redevelopment is being developed in an area with low income, and low access to food products as defined by the United States Department of Agriculture (USDA). This area is defined using census tracts in Figure 6 with the green area representing the one-mile distance and the orange area representing a half mile distance in urban communities.⁹⁴

⁹⁴ Rhone, A., Ver Ploeg, M., Williams, R., and Breneman, V. (May 2019). *Understanding Low-Income and Low-Access Census Tracts Across the Nation: Subnational and Subpopulation Estimates of Access to Healthy Food*. Economic Research Service, U.S. Department of Agriculture. Retrieved from <https://www.ers.usda.gov/publications/pub-details/?pubid=93140>

Figure 6: Low-Income and Low-Access Census Tracts



Date: 3/10/2022
Source: USDA Economic Research Service, ESRI. For more information <https://www.ers.usda.gov/data-products/food-access-research-atlas/documentation>

While the retail opportunity gap analysis illustrates that this community has a strong retail sector, Figure 6 shows that at the census tract level the benefits are not evenly spread across the community. Due to this discrepancy, it is difficult for the private market to decide to place new stores closer to the low-income, low-access neighborhoods because the overall retail profile of the area looks stronger. This means that it is more difficult to recruit retailers and food vendors to the less well-off parts of this area thus increasing the issue of access to quality food products. One way to address this issue is for community groups, nonprofits or local governments to make investments in this area that improve access to food products.

Another way to develop an understanding of the growth possibilities in this area is to analyze the upcoming growth trends in the selected retail and food service industries. These estimates start in 2022 and end in 2027, and they cover the previously defined radius distance surrounding the Water Works building. The projections show that the retail market is predicted to grow over the next several years. The data in Table 8 illustrates that on a percentage basis, the one-mile radius is projected to grow the fastest while the three-mile radius is anticipated to experience the largest increase in dollar value.

Table 8: Radius distance from Water Works Building

	1-mile Radius		2-mile Radius		3-Mile Radius	
	Growth*	Annual % increase	Growth*	Annual % increase	Growth*	Annual % increase
Total retail trade including food and drink (NAICS 44, 45 and 722)	18,723,081	2.24	56,892,075	1.87	90,668,235	1.75
Retail Trade (44)	16,254,815	2.17	48,962,573	1.80	78,088,811	1.68
Motor Vehicle and Parts Dealers (441)	4,486,394	2.43	13,619,741	2.00	21,920,484	1.88
Furniture and Home Furnishings Stores (442)	43,573	0.38	24,552	0.06	-52,297	-0.07
Electronics and Appliance Stores (443)	180,249	1.91	527,910	1.54	831,294	1.42
Building Material and Garden Equipment and Supplies Dealers (444)	954,684	1.82	3,049,054	1.56	5,245,083	1.54
Food and Beverage Stores (445)	2,298,932	2.08	6,838,516	1.74	10,732,492	1.60
Health and Personal Care Stores (446)	1,364,147	2.83	4,451,148	2.56	7,287,575	2.44
Gasoline Stations (447)	2,280,751	3.42	7,136,963	3.01	11,420,877	2.84
Clothing and Clothing Accessories Stores (448)	9,916	0.04	-330,890	-0.37	-723,002	-0.48
Sporting Goods, Hobby, Musical Instrument, and Book Stores (451)	-330,890	-0.37	428,152	1.35	638,513	1.18
General Merchandise Stores (452)	1,835,083	1.93	5,344,030	1.57	8,346,438	1.44
Miscellaneous Store Retailers (453)	258,566	1.66	729,448	1.28	1,094,286	1.14
Nonstore Retailers (454)	2,384,680	1.93	7,143,949	1.59	11,347,067	1.48
Food Services and Drinking Places (722)	2,468,266	2.92	7,929,502	2.51	12,579,424	2.38
Special Food Services (7223)	198,671	2.92	635,874	2.51	1,009,928	2.38
Drinking Places (Alcoholic Beverages) (7224)	67,378	2.89	235,970	2.56	363,595	2.38
Restaurants and Other Eating Places (7225)	2,202,217	2.92	7,057,658	2.51	11,205,901	2.38

*Growth in \$

Source: Caritas Retail Stores Retail Stores Demand Growth 2022

Table 8 is an abbreviated table, and the complete data is presented in Appendix D. Demand for goods in the food and beverage services industry is expected to increase across all three radius distances. Although this growth is not faster than the region as a whole, it still illustrates that demand for goods is likely increasing. In addition, the miscellaneous store retailers are also projected to steadily grow on an annual basis. This increase is expected to be just over \$1,000,000 at the three-mile radius in 2027. The sector with the highest level of growth is the food services and drinking places. This segment of the market is projected to grow by \$2.5 million at the one-mile radius, \$7.9 million at the two-mile radius, and \$12.6 million at the three-mile radius.

Each of these industries could be included in the Water Works development. This forecast illustrates that these industries are expected to grow in the next five years. This growth indicates that adding a permanent farmers' market, incubator, and/or food hall could contribute to regional development without taking away from an existing business.

Farmers' markets address the needs and desires of many communities. Many consumers are looking for locally produced items because these products are perceived as healthier, safer, and tastier than products shipped from faraway locations.⁹⁵ Most farmers' market patrons attend these markets to purchase whole foods while social interaction, ready-to-eat/packaged foods, and artisanal items only account for 22 percent of the draw.⁹⁶ There are also some consumers who want to support local communities and simply know where their food is coming from.⁹⁷ Hosting a regular farmers' market could serve both the neighborhoods close to the Water Works building and the wider community.

Consumers from all backgrounds can benefit from the food options available at a farmers' market. For example, in Chicago where Black/African American neighborhoods have limited access to fresh fruits and vegetables, farmers' markets can be used to supplement grocery store purchases. The residents of these neighborhoods are more satisfied with the available food products if the markets provide quality products, a variety of options, and the prices match those at local stores.⁹⁸ In Minneapolis, its farmers' market also draws in consumers from a variety of backgrounds. At this market it is more common for non-White consumers to purchase the same, familiar products they desire.⁹⁹ In Chicago, the majority of consumers are females between 40 and 75 and spend \$10 to \$20 each week that the market is open. Similarly in Minneapolis, the majority of consumers are females between the ages of 35 and 59 and those identifying as White, Latino, South Asian, or African American spend between \$20 and \$39 each visit.

⁹⁵ Tarr, M., Revels, S., and Rumley, R. (n.d.). *Georgia Direct Farm Business Guide*. The National Agriculture Law Center. Retrieved from <https://nationalaglawcenter.org/wp-content/uploads/assets/articles/GA-DFM.pdf>

⁹⁶ Gumirakiza, J. D., Curtis, K., Bosworth, R. (2014). *Who Attends Farmers' Markets and Why? Understanding Consumers and their Motivations*. International Food and Agribusiness Management Association. Retrieved from <https://ifama.org/resources/Documents/v17i2/Gumirakiza-Curtis-Bosworth.pdf>

⁹⁷ Ibid, Tarr, Revels, and Rumley

⁹⁸ Suarez-Balcazar, Y., Martinez, L., Cox, G., Jayraj, A. (n.d.). African Americans' Views on Access to Healthy Foods: What a Farmers' Market Provides. *Journal of Extension*. Retrieved from: <https://archives.joe.org/joe/2006april/a2.php>

⁹⁹ Slocum, R., Ellsworth, E., Zerbib, S., and Saldanha, A. (n.d.). *Local Food and Diversity in Public Space: A Study of the Perceptions and Practices of Minneapolis Farmers' Market Customers*. Farmers Market Coalition. Retrieved from https://farmersmarketcoalition.org/wp-content/uploads/2013/12/Slocum_CURA_Local-Food-and-Diversity-in-Public-Space_Minneapolis-Farmers-Market.pdf

Agricultural Production Market Profile

Securing vendors is critical for the potential permanent year-round farmers' market at the new Water Works redevelopment to succeed. Therefore, the team has interviewed farmers, ranchers, and other small food-related businesses located in the region to gauge their interest in participating at a new permanent farmers' market in Savannah. Out of the 28 that have been contacted, 17 of these business owners have responded and subsequently been interviewed for a response rate of 60 percent. Table 9 describes some of the findings of these discussions.

Table 9: Producer Market Participation Interest

Producer	Products	Interest in Market	Days per Week	Drive Time to Savannah (in minutes)	Number of Months Able to Provide Product	Ethnicity/Sex
920 Cattle	Meat	Yes	2	60 – 80	12	White/Male & Female
Alake's Georgia Pecans	Pecans, Pecan products	Yes	4	(Local)	12	Black/Male
Autumn's Harvest	Specialty peppers, pepper powder	Yes	1-2	90	4-5 fresh produce 10-11 pepper powder	White/Female
Bootleg Farm	Chicken, rabbit, goat milk, eggs	Yes	1	45	12	White/Male
Cappy's Farm Fresh Food	Baked goods	Yes	1-3	40	12	White/Female
CJ's Produce	Vegetables	Yes	2 weekends/month	(Local)	~7	Black/Male & Female
Ebenezer Greens	Microgreens	Yes	2	20	12	Indian/Male
Frali Gourmet	Pasta, sauce, bread	No	-	(Local)	-	White/Male
Gannon Organics	Vegetables	Yes	1-2	15	12	White/Male
Hunter Cattle	Meat	Yes	1	45	12	White/Male
Joseph Fields Farm	Fruits, Vegetables	No	-	137	-	Black/Male
OzzMac Farms	Vegetables, herbs	Yes	4 (Oct – Apr: 6)	105	12	Black/Female
Promised Land Farms	Vegetables	Maybe	3 – 5	20	12	Black/Male/ Seniors
Readee's Bees	Honey	Yes	3	20	12	White/Male
Savannah River Farms	Meat	Yes	3	50	12	White/Male & Female
Swampy Appleseed	Mushrooms	Yes	1-2	75	12	White/Male
Vertu Farm	Microgreens	No	-	(Local)	-	White/Male
Vital Mission Farm	Poultry, fruit, nuts	Yes	2-3	120	12	White Male
<i>Source: Phone Conversations, 2022</i>						

About eighty percent of producers interviewed have expressed interest in participating in this new permanent farmers' market located in Savannah. Several are very excited about the potential opportunity, and others are even more captured by the kitchen incubator component. Gannon Organics exhibits high interest in the kitchen incubator space. Autumn's Harvest lost access to their latest commercial kitchen and is thrilled about this potential new kitchen incubator space in Savannah. Both Autumn's Harvest and Farm Fresh Food say that access to the kitchen incubator would influence a higher participation rate in the connected farmers' market. Frali Gourmet of Savannah, though not interested in participating in the farmers' market, also conveyed intrigue into the kitchen incubator.

Several interviewees have communicated that their level of participation would depend on factors such as which days of the week and what hours the market is open and how much foot traffic is there. The foot traffic to vendor ratio has also been addressed. OzzMac Farms, for example, left Forsyth Farmers' Market in Savannah because it became overcrowded with vendors which made it hard for OzzMac to earn enough.

Most producers are looking at one to three days per week of participation, but for some it could be more. Some describe the weekends as the best timeframe, and others explain that their weekends were already committed to other farmers' markets and weekdays would work best for them. Many of the producers interviewed are involved with Forsyth Farmers' Market on Saturdays, so this day of the week is less likely to draw in some preexisting market vendors. Because there is a variety of responses to this topic, it may be possible that the Water Works farmers' market remains open several days throughout the week with rotating vendors.

In addition to the farmers' market component, Hunter Cattle is also interested in the permanent retail space as the business sells t-shirts, spices, and other retail products. One uninterested producer, Vertu Farm, feels that participating in this new market would be competing with himself in the sense that participating in a new permanent farmers' market would take away the established customer base from his regular market at Forsyth.

For a potential vendor fee, most of these producers are willing to pay around \$30 per market day, which Vital Mission Farm describes as a reasonable price. This aligns with the Forsyth Farmers' Market vendor fee. Some interviewees are possibly willing to pay more, depending. Savannah River Farms and Autumn's Harvest have mentioned \$50, but Autumn's Harvest explains that the foot traffic would have to be good enough to sustain this price. Cappy's Farm Fresh Food says this price would also be their limit as the market grows, but they expect a lower fee at the start of the redevelopment. While as an outlier CJ's Produce might consider a daily vendor fee as high as \$75 to \$85, the primary reason Vital Mission Farm quit another market was due to its high \$65 to \$75 vendor fee. CJ's Produce also questions if the operation might offer a monthly membership fee instead.

Some producers that are located further away from Savannah are still interested in participating in the farmers' market. However, these producers tend to have business already in Savannah. For example, Vital Mission Farm, which is two hours out of the city, has an employee located in Savannah that the company could utilize for this farmers' market. Autumn's Harvest is another example where one of the owners already works another job in Savannah and is looking to move

closer to the city. OzzMac Farms also conducts business in Savannah already. Out of all the producers interviewed, distance to Savannah ranges from a drive time of 15 minutes to two hours. No matter the distance, nearly all interested parties can provide products 12 months a year.

It is worth noting that CJ's Produce expresses concern for consumers. This business is active in transforming low income and low access food urban areas by implementing sustainable community gardens and by traveling to different areas in their farm truck to sell produce. CJ's Produce said that it is important for market produce to be affordable for local residents, whether that be through assistance like SNAP benefits, to ensure those who need fresh food the most can attain it. Access to regular paying customers is also important for the sustainability of a vendor.

While the overall response is positive, and some producers are very enthusiastic, many pose questions and desire more details on market management. For example, Bootleg Farm and Hunter Cattle want to know how capable vendors would be in unloading products on site given the location of the Water Works building, and Ebenezer Greens hesitates if the facility operates similar to a shopping center. Additionally, Hunter Cattle explains that as a meat producer, being able to leave a freezer in the facility permanently could positively influence their willingness to participate in this market. Interviewees understand that the information they have provided will help inform redevelopment planners in operations planning, specifically of the farmers' market component, and they look forward to receiving more information when the project commences.

It is advised that redevelopment planners reach out to the producers interviewed for this report when farmers' market plans are underway. A complete list of farmers, ranchers, and other vendors that have been interviewed and their relevant contact information will be provided to the client in a separate document. To add to the number of vendors the Georgia Department of Agriculture suggests that farmers' markets contact Georgia Grown as well as consult the local extension office, put an ad in the Market Bulletin, and talk with other market managers.¹⁰⁰ Additionally, the Black Farmers Network which is a good resource that can be utilized to find local black farmers in the area.¹⁰¹ The team reached out to this group on multiple occasions and received limited response.

¹⁰⁰ *The Georgia Farmers Market Guide: Farmers Market Toolkit*. (n.d.). The Georgia Department of Agriculture. Retrieved from http://agr.georgia.gov/data/sites/1/media/ag_marketing/the-farmers-market-guide.pdf

¹⁰¹ *National Black Farmers Association* website: <https://www.blackfarmers.org/>; *Black Farmers Network* website: <https://blackfarmersnetwork.com/>, email: info@blackfarmersnetwork.com

Budget and Financial Requirements

In this part of the report, the research team developed an initial pro forma budget. This budget is a general estimate of what it will cost the City of Savannah to operate the farmers’ market and incubator. It includes four full-time staff and other non-personnel operating costs including but not limited to supplies, marketing, client support information, and scheduling software. Actual figures may vary from this initial estimate as the farmers' market and incubator grow and as program dynamics become clear. The staffing level is at a minimum level and is based upon the information outlined in the previous sections of this report. The position titles include a director/facilities manager, a program/farmers market coordinator, an office manager, and a marketing coordinator.

Table 10: Potential Budget for Joint Farmers’ Market and General-Purpose Incubator Facility			
Budget Item	Year 1	Year 2	Year 3
Personnel (salary and benefits)	\$288,800	\$296,886	\$305,199
Sub-Total Personnel	288,800	296,886	305,199
Travel	3,200	3,290	3,382
Supplies, Marketing, Clients Support, Information technology, etc.	127,000	130,556	134,212
Professional/Janitorial Services, Repairs & Maintenance, Utilities, etc.	85,000	87,380	89,827
Total Operating Expenses	215,200	221,226	227,420
Total	\$504,000	\$518,112	\$532,619
<i>*In \$</i>			

The figures outlined in Table 10 cover the facility with the farmers’ market, food hall, and a non-kitchen, or general-purpose, business incubator.

Adding a kitchen incubator into this redevelopment will require additional costs to the budgetary needs. It is possible to operate a shared kitchen space for less than \$100,000, the budget that was followed by 57 percent of kitchen incubators in the United States in 2019. Another 25 percent of kitchen incubators operated with a budget between \$100,000 and \$249,999 in 2019. Based on these figures and the amount of services that the potential clients are requesting the kitchen incubator will likely add a minimum additional cost ranging between \$100,000 and \$249,999.¹⁰² At the low end this could include a part-time staff member with experience in the food services

¹⁰² Ibid, *U.S. Kitchen Incubators: An Industry Update*.

industry to manage the facility and the increased maintenance cost for equipment in the kitchen. The higher end of this cost would likely include at least two full-time equivalent staff members with experience in the food preparation industry and the increased maintenance and operational costs linked to a fully utilized kitchen.

A kitchen incubator will require additional start-up costs as well as operational costs. First, the kitchen will require proper construction to meet the codes and standards of a kitchen facility as well as the right equipment to run the kitchen.

- **Construction:** Construction of a kitchen can cost between \$250,000 and \$350,000.¹⁰³
- **Equipment:** A shared-use kitchen will require the basics in equipment. This includes storage (e.g., shelving units, drying racks, food storage containers), refrigeration (e.g., freezer, refrigerator), food prep and cooking (e.g., oven, range, fryer, grill, industrial mixers, food processors), and smallwares (e.g., pots, pans). The final cost of kitchen equipment depends on several factors including brands and styles, single-use versus multi-use items, and whether or not a piece of equipment is second hand or purchased brand new. Basic equipment could easily fall within the range of \$29,800 to \$211,500.¹⁰⁴ Specialty equipment would also add to the initial equipment cost. Examples of specialty kitchen equipment include soft-serve ice cream machines, pasta makers, and canning equipment.

The largest operational costs of kitchen incubators include rent/mortgage as well as salaries and benefits.¹⁰⁵ Other areas that make up a significant portion of the operating budget include utilities, maintenance, and debt service.¹⁰⁶ Since the kitchen incubator is being explored as an option to be included in the Water Works redevelopment, rent/mortgage as well as debt service are not factors considered in this scenario.

- **Salaries and benefits:** Assuming the Water Works redevelopment facility will hire one kitchen manager to run the kitchen incubator, the median costs for this position in Georgia is approximately \$80,579 (\$52,744 in salary and \$27,835 in benefits) annually.¹⁰⁷
- **Utilities:** A 4,000 square foot building with a commercial kitchen in an average U.S. climate would spend about \$3.75 per square foot or \$15,000 annually in electricity and gas.¹⁰⁸ The type of equipment used in the commercial kitchen may influence some utility

¹⁰³ *How Much Does It Cost to Build a Commercial Kitchen for a Restaurant?* 2ndKitchen. Retrieved from <https://2ndkitchen.com/restaurants/commercial-kitchen-cost/>

¹⁰⁴ Editorial Team. (11 December 2019). *Commercial Kitchen Costs You Need to Keep Track of*. Point of Sale. Retrieved from <https://pointofsale.com/commercial-kitchen-costs-you-need-to-keep-track-of/>

¹⁰⁵ Ibid, *U.S. Kitchen Incubators: An Industry Update*.

¹⁰⁶ Ibid, *U.S. Kitchen Incubators: An Industry Update*.

¹⁰⁷ Kitchen Manager in Georgia Benefits. Retrieved from <https://www.salary.com/tools/benefits-calculator/kitchen-manager/ga>

¹⁰⁸ Crk, T. (n.d.). *How to Cut Utility Costs in Your Commercial Kitchen*. Energy Star. Retrieved from <https://www.energystar.gov/products/ask-the-experts/how-to-cut-utility-costs-in-your-commercial-kitchen>

rates. It's possible that choosing electric appliances instead of gas may lessen ventilation requirements which leads to more savings.¹⁰⁹

- **Maintenance:** Maintenance includes a few factors. There are daily chores such as properly cleaning the workspaces before and after each use, garbage disposal, and pest control. Regular cleaning by a professional company costs \$0.12 to \$0.20 per square foot or \$20 to \$25 per hour for the floor, \$0.30 to \$0.40 cents per square foot or \$50 to \$75 per hour for the kitchen, \$0.30 to \$0.40 per square foot or \$50 to \$75 per hour for the walk-in refrigerator, \$120 to \$200 per hour for hood cleaning, \$50 to \$75 per hour for exhaust fans, and \$5 to \$10 per hour for filter cleaning.¹¹⁰ Maintenance also includes replacing equipment when necessary. This would cause fluctuations in the annual maintenance budget as large equipment replacement is not an expected yearly cost. It would be recommended to have a service technician perform regular maintenance assessments to determine when items may need replaced.

Based on this information, the Water Works redevelopment could expect to spend \$279,800 to \$561,500 in start-up costs. With a full-time manager for the kitchen incubator, the kitchen could expect to fall within the \$100,000 to \$249,000 budget range that 25 percent of U.S. incubators follow as previously defined. If project planners choose to move forward with a kitchen incubator, a helpful resource to consult for compliance purposes is the Guidelines for Incubator Kitchens by the Association of Food and Drug Officials.¹¹¹

Potential Revenue

The current Water Works building is currently 15,500 square feet. Using the Savannah Water Works Pump Station Proposed Adaptive Reuse Concepts the plan is to renovate the first floor and add a second floor to this building. After these adjustments are completed, building will be approximately 25,500 square feet of space. This is comprised of 15,500 square feet on the ground floor and 10,000 square feet on the upper level.¹¹² This floor plan is used to estimate the layout of the facility. Revenue estimates are calculated using pricing structures at similar developments.

The following calculations are based on information gathered by the research team using the comparison group and publicly available sources. Ultimately the City of Savannah will determine in the final design how much space will be allocated to each segment. Table 11 describes potential revenue estimates based on the current design of the redevelopment, and it assumes that farmers' market and food hall restaurant vendors will be located on the ground floor and that incubator components will be located on the upper level. The figures provide a vision of potential revenue when the facility is operating at full capacity.

¹⁰⁹ Decker, F. (5 April 2019). *The Estimated Cost for a Commercial Kitchen in a Small Business*. CHRON. Retrieved from <https://smallbusiness.chron.com/estimated-cost-commercial-kitchen-small-business-74630.html>

¹¹⁰ *How Much Does Restaurant Cleaning Cost? – [2022 Rates]*. (n.d.). CostHack. Retrieved from <https://costhack.com/restaurant-cleaning-service-cost/>

¹¹¹ *Guidelines for Incubator Kitchens*. (September 2017). Association of Food and Drug Officials. Retrieved from https://www.afdo.org/wp-content/uploads/2020/11/Guidelines_for_Incubator_Kitchens_acc_updated_2017.pdf

¹¹² *Savannah Water Works Pump Station: Proposed Adaptive Reuse Concepts*. (1 July 2020). Harris+Smith and Cardno, Inc.

Table 11: Potential Revenue After Adaptive Reuse Development is Completed					
	Average Space Occupied (sq. ft.)	Average Rental Fee	Estimated Amount of Clients/Usage	Total Space Occupied (sq. ft.)	Total Annual Revenue
GROUND FLOOR (15,500 sq. ft.)					
<i>Farmers' Market Stalls</i>	100	\$30 /day	25/day 50/week	2,500	\$78,000
<i>Food Hall Restaurant Stalls</i>	305	\$4,250 / month	8	2,440	\$408,000
PROPOSED UPPER LEVEL (10,000 sq. ft.)					
<i>Offices</i>	200	\$525/ month	15	3,000	94,500
<i>Classroom/Conference Room</i>				1,00	
<i>Sources: LoopNet: 7002 Hodgson Memorial Dr, Coworking Space in Savannah; Regus: The Altmayer Building; hap: Worksite Farmers' Market How-To Guide; NASS/USDA/Agricultural Statistics Board</i>					

Although the farmers' market is a popular idea by both local residents and the city, it alone is not enough to maintain the Water Works Market. Food hall restaurant vendor rent comprises much of this revenue forecast. Facility managers may want to consider securing an anchor tenant for both the farmers' market and the food hall. An anchor tenant is a business that will use the location as their primary base of operations in the Savannah area. Anchor tenants guarantee that a vendor will be using the space regularly and they typically pay a higher rental rate based on their need for space.

The forecast focuses on the core areas of each operation considered. This approach provides a general overview of what is possible in terms of revenue generation. However, there is potential for additional revenue to be made within each area. The remainder of this section highlights the assumptions used to create this pro forma.

Farmers' Market Stalls

The average vendor fee local producers are willing to pay at the Water Works market is \$30 per day. Across the nation there are on average 25 vendors present at a market per market day.¹¹³ Given that local producers are willing to participate in the Water Works farmers' market one to

¹¹³ *National Farmers Market Managers: Farmer Market Managers Highlights*. (17 August 2020). National Agricultural Statistics Services, Agricultural Statistics Board, and United States Department of Agriculture.

three days a week, an average of two days per week results in a weekly revenue of \$1,500.¹¹⁴ This leads to an annual income of \$78,000.¹¹⁵ These numbers are only considering the permanent farmers' market and do not account for the possibility of more vendors participating in potential available spaces outside of the building during growing season.

Mark Halliday from River Street Marketplace explains that a 5-foot by 10-foot vendor space at the River Street Marketplace is \$745 per month. He warns, however, that this price would be too high for the Water Works market in its infancy and would deter vendors from joining. He also advises that rental space prices should differ depending on where a vendor stall is located on the floor. For example, he sometimes offers a 10 to 20 percent discount to vendors working in a back corner away from the entrance opening and with less traffic.

Food Hall Restaurant Stalls

Following the example of Morgan Street Food Hall in Raleigh, North Carolina, available food stalls range from as low as 30 square feet to over 550 square feet and cost vendors anywhere from \$500 to \$8,000 per month.¹¹⁶ Using these figures, the average food hall vendor uses 305 square feet and pays \$4,250 per month. According to these numbers, if the Water Works redevelopment secured eight food hall restaurant vendors, it would allot 2,440 square feet to restaurant vendors (close to the estimated allotment for farmers' market vendors) and generate about \$408,000 in revenue annually.

While this example serves as an estimate for potential revenue from the food hall component operating at full capacity, there are other factors that should be considered when determining the financial structure of this element. The first is affordability for potential vendors coming out of the Savannah region. Another factor is in the design of the physical space, determining if each vendor space will be made equal in terms of size and available equipment (e.g., hood vs. no hood). If vendor space is not uniform, this will require a scaling of rental fees. Managers must also determine how to charge vendors. For example, the Pizitz Food Hall in Birmingham, Alabama charges vendors renting out the 3,000 square foot spaces \$2,000 to \$2,200 per month or 10 percent of sales, whichever is greater.¹¹⁷ One more element to consider is what will be included in the rent. Pizitz Food Hall vendors are responsible for utilities, but janitorial and security services are provided by the facility.

Incubator

Most incubators use a membership model. As part of the membership fee, incubator clients receive the benefits of consulting and business development support. The comparison facilities have 10 to 15 clients at a given time. Currently in the Savannah area there are two coworking spaces. One is located at 7002 Hodgson Memorial Drive and offers office space of \$475 per

¹¹⁴ 25 vendors * 2 days/week * \$30/day

¹¹⁵ \$1,500 * 52 weeks

¹¹⁶ *Frequently Asked Questions*. (n.d.). Morgan Street Food Hall. Retrieved from <https://www.morganfoodhall.com/vendor-faq/>

¹¹⁷ Phone conversation with Didi Shashy. (2022)

month,¹¹⁸ and the other is located at 100 Bull Street with office space for \$440 per month.¹¹⁹ As part of the business incubator process, the Water Works incubator would be offering services that are above and beyond simply having an office. It is through the services (classes, consulting, etc.) offered by an incubator that this space is set apart from coworking spaces. This means that it is possible for office retail fees to be in the \$525 per month range. If 15 offices were to be available to clients, this would lead to an annual revenue of \$94,500. It is very possible to add more services within the incubator for businesses that are looking for drop-in space and open office space. This means that this revenue estimate is potentially underrepresenting the amount of revenue that could be fully generated from a general-purpose incubator that includes drop-in and open office desk space. Additionally, on the general business entrepreneurship side, the incubator program has the option to offer classes that non-incubator clients may sign up for. To combine the desires of both the City of Savannah and the local community, the incubator concept may offer regular consulting and business development support to incubator clients and non-clients alike.

If a kitchen incubator is included in the design, additional revenue could come from fees to rent out kitchen time. From the comparison group, Allen Neighborhood Center charges \$14 per hour up to 20 hours per month for their shared-use kitchen, and Flint Food Works started charging at \$15 per hour but has since increased to \$18 per hour. Assuming the Water Works redevelopment rents out the kitchen(s) for 60 hours per week at \$16 per hour, the shared-use kitchen can generate \$960 per week, or \$49,920 annually. In addition, kitchen incubators typically charge a membership fee on top of the rental rates. If this fee is similar to the closed-door office rate of \$525 a month and the incubator has 15 members, the annual total is \$94,500. With these combined fees, it is possible that the kitchen incubator could bring in enough revenue to break even, however only for this segment of the facility.

The kitchen may also be rented out to non-incubator clients, as in the example of the Nashville Farmers' Market kitchen incubator. Food entrepreneurs and other non-incubator clients who only need or desire occasional access to kitchens could also be allowed to use this space at an hourly rate that is well above the member rate. This might be beneficial in the case of food trucks or market vendors with value-added food products. If revenue from kitchen incubator clients help the incubator to break even, it is possible revenue from additional non-members renting kitchen time could turn a profit.

¹¹⁸ *7002 Hodgson Memorial Dr. Coworking Space Available in Savannah.* (n.d.). LoopNet. Retrieved from <https://www.loopnet.com/Listing/7002-Hodgson-Memorial-Dr-Savannah-GA/4143749/> (accessed 15 March 2022).

¹¹⁹ *The Altmayer Building.* (n.d.). Regus. Retrieved from <https://www.regus.com/en-us/united-states/georgia/savannah/the-altmayer-building-2471> (accessed 15 March 2022).

Next Steps

Currently, there is an expansive vision for the Water Works redevelopment. This multifaceted project in all its envisioned elements is feasible from the perspective of resident surveys, market analysis, vendor interviews, financial projections, and examples of similar facilities. It will take several years for the extent of this vision to be realized. There are many ways to pursue the opportunities linked to this redevelopment. When creating the next steps, the team seeks to balance the needs of the local neighborhood, larger Savannah community, and the City of Savannah. The next steps were developed by the research team and could either be undertaken simultaneously or be completed as a step-by-step process.

- Working with neighborhood leaders, the City of Savannah needs to develop clear goals and objectives for the development of this redevelopment which identify the services provided in the facility. Included in these objectives should be benchmarks or a checklist of activities that will be used to continue the trust building process with neighborhood leaders.
- Funding must be identified to renovate and redesigned the Water Works building. In 2020, the cost of renovation was estimated to be \$14 million according to a document provided to the research team by the City of Savannah. The estimate was prepared by Savannah Construction & Preservation, LLC. This estimate needs to be revised as construction cost increased by 17.5 percent for 2020 to 2021¹²⁰ and it did not include any equipment for the incubator or commercial kitchen.
- As part of the design process, food halls often have small prep kitchens included in their vendor spaces. If this is a desired element, it will be important for the City to make sure that these features are accounted for in the development process.
- It is important to decide early in the design process if the facility will include a shared-use kitchen. Including a kitchen does not make it impossible to offer business development and skill-building services to non-food entrepreneurs. Adding a kitchen could draw in more clients, but it would add to operational and construction costs.
- If the City chooses to move forward with a kitchen incubator, then a kitchen designer will need to be hired to ensure that the space is designed to facilitate food safety protocols and operational best practices for a shared-use commercial kitchen.
- Developers should work to strengthen relationships with other business development organizations in Savannah that the Water Works Market could partner with for classes and other services to be provided on site. Potential partners could include the Logistics Technology Innovation Center, the Coastal Small Business Development Center, the Minority and Women's Business Center, and the Small Business Assistance Corporation.
- In order to maximize community engagement, the City may consider hosting community events in the Enmarket Arena. These could include the aforementioned business development services as well as events of interest identified in the Community Survey.

¹²⁰ *Monthly Construction Spending, March 2022*. (2 May 2022). United States Census Bureau. Retrieved from <https://www.census.gov/construction/c30/pdf/release.pdf>

This provides an opportunity to offer a variety of classes for local community members in the arena now while the Water Works building is in the process of development.

- If the City chooses to move forward with the farmers' market, the City will need to determine when to start this market. Based on the other facilities examined in this analysis it is possible to operate a larger seasonal market. Therefore, the City could choose to test this market in outdoor spaces before construction is completed on the permanent building. This also allows for services to be offered before the final facility opens.
- When developing the farmers' market, redevelopment leaders should consider partnering with an existing farmers' market in the Savannah area, like Forsyth. This partnership could make it easier to start the market and attract vendors to the new Water Works farmers' market located in the Canal District. The startup costs could reach \$50,000 for basic setup¹²¹ with estimated revenues reaching \$78,000 annually once the market is operating regularly. Initially this leaves limited funding for personnel, marketing, and other operational costs. This is why the team includes a farmers market staff member that splits time between the incubator and farmers' market.
- Development leaders should pursue available funding options to assist with financial costs including grants offered by the Georgia Department of Agriculture,¹²² the Local Food Promotion Program with the United States Department of Agriculture (USDA)¹²³, and the Farmers Market Promotion Program also with the USDA.¹²⁴

The next steps presented in this section are based on our research. These steps are not necessarily listed in a concrete order that should be followed. Rather, project leaders should determine an order of operations that works for the City of Savannah and the community.

¹²¹ Farmers' Market, (2022) Entrepreneur. Retrieved from <https://www.entrepreneur.com/businessideas/farmers-market>

¹²² *Grants*. (n.d.). Georgia Department of Agriculture. Retrieved from <https://agr.georgia.gov/grants.aspx>

¹²³ *Local Food Promotion Program*. (n.d.). United States Department of Agriculture. Retrieved from <https://www.ams.usda.gov/services/grants/lfpp>

¹²⁴ *Farmers Market Promotion Program*. (n.d.). United States Department of Agriculture. Retrieved from <https://www.ams.usda.gov/services/grants/fmpp>

Conclusion

This report finds that including a permanent year-round farmers' market, food hall, retail space, and business incubator are all feasible uses for the renovated Water Works Pump House building. Similar redevelopments have been found to be viable in other communities including Flint, Michigan, Lansing, Michigan and Nashville, Tennessee. After discussions with greater westside residents and a community survey, the top two desired benefits to be gained from the Water Works facility are economic (business and job creation) growth and the creation of a fun, positive, and social environment. Greater westside residents also express a strong desire for a farmers' market, retail space for locally produced products, and ethnic food restaurants in the facility.

Although a retail opportunity gap indicated that this area is well served by the local retail market, this analysis was highly influenced by the presence of tourists close to this target area. The USDA has labeled greater westside Savannah a low-income and low-access food area. This means that there is limited access to fresh food products in many parts of greater westside Savannah. This makes a permanent farmers' market with vegetables, dairy products, proteins, and other produce variety a priority for this project. When farmers' markets that offer prices comparable to grocery stores are introduced into these types of communities, the markets experience an increase in support from local residents and provide consumers with access to fresh food. If a food hall is included in this space, the types of food restaurants provide and their hours of operation should support both arena and greater westside residents' needs.

In addition to the farmers' market and food hall, the community has expressed a strong desire for there to be entrepreneurial services available at the Water works building. These services could include technical assistance, financial resources, and technology infrastructure. All of these services are offered by business incubators. These types of services could meet the demands of both greater westside residents and the wider Savannah community. An incubator in the Water Works Market is feasible and could likely gain traction as an asset for economic growth in the community. The incubator should offer general services for individuals interested in starting a business and acquiring other professional skills and for those clients that have already started operating a business venture. The only point of conflict with greater westside residents is whether to include a commercial kitchen in the Water Works building, the concern being that residents want to ensure professional development services are available for those not a part of the food industry.

This analysis found that a commercial kitchen in the Water Works redevelopment would be feasible, and there is demand for this type of space from both City residents and companies doing business in Savannah. If a commercial kitchen is included in the final design of the redevelopment, leaders will need to address two major concerns. The first is staffing. Experienced professionals are needed to manage a commercial kitchen and related programming. A second incubator manager is required to service nonfood related clients and create appropriate curriculum. It is likely that these need to remain as two separate positions.

Secondly, additional funds will be needed to support the marketing efforts to greater westside residents. There is a great deal of concern that a kitchen incubator will only be helping food businesses and the space will not serve the needs of greater westside residents. However, the

inclusion of a commercial kitchen does not preclude the offering of general-purpose business development and skill building services. This point must be clearly and consistently communicated to greater westside residents that other services will be made available.

Overall, redevelopment leaders will need to find a balance between the needs of the stakeholders in this redevelopment. As separate operations, a year-round farmers market, a food hall, and a business incubator are all feasible uses for the Water Works building. Combined, these operations could be a powerful tool for the development of the Canal District and the Water Works Market a major new asset for greater westside Savannah.

Appendix A: Community Survey Questionnaire

Thank you for expressing your valued opinions about the future development of the Water Works site that is adjacent to the new Enmarket arena and located just west of downtown Savannah on the northeast corner of Stiles Avenue and Gwinnett Street in the Canal District. The project includes the Water Works building, some surrounding structures and outdoor areas.

Please be assured that your responses to this brief 4-6 minute survey will remain totally anonymous and will only be used to help create a unique, successful gathering place for the community.

Please be sure to answer each question or statement.

Thank you again for your valuable input.

Please let us know the zip code where you reside:

- 31302
- 31322
- 31324
- 31328
- 31401
- 31402
- 31403
- 31404
- 31405
- 31406
- 31407
- 31408
- 31409
- 31410
- 31411
- 31412
- 31414
- 31415
- 31416
- 31418
- 31419
- 31420
- 31421
- 31498
- 31499
- Other _____

Q1 Were you aware of the new Enmarket Arena and Canal District before participating in this survey?

- Yes
- No

Q2 Were you aware of the redevelopment of the Water Works Center before participating in the survey?

- Yes
- No

Q3 Please rate how important each of the following **benefits** that the Water Works Center may provide to you or to the local Savannah community.

	Not at all important	Slightly important	Moderately important	Very important	Extremely important
Creates economic benefits for the community	<input type="radio"/>				
Promotes a healthy lifestyle	<input type="radio"/>				
Creates a learning environment	<input type="radio"/>				
Creates a place to seek life enrichment opportunities	<input type="radio"/>				
Provides a fun, positive, social environment	<input type="radio"/>				
Provides a positive youth experience	<input type="radio"/>				
Provides for a good family experience	<input type="radio"/>				
Provides a unique culinary and eating experience	<input type="radio"/>				
Provides a unique visitor destination	<input type="radio"/>				

Q4 Please state your interest in specific **learning events** that could be held at the Water Works Center.

	Not interested at all	Slightly interested	Moderately interested	Very interested	Extremely interested
Wealth management and investment seminars	<input type="radio"/>				
Science technology, IT, logistics, electrical, or mechanical training	<input type="radio"/>				
Sustainability and agricultural training programs	<input type="radio"/>				
Various well being health programs and screenings	<input type="radio"/>				
Introduction to art, music or performing arts	<input type="radio"/>				
Computer software and technology training	<input type="radio"/>				
Business startup programs	<input type="radio"/>				
State any other learning event idea you may have:	<input type="radio"/>				

Q5 Please state your interest in the following **venues** that could be located at the Water Works Center.

	Not interested at all	Slightly interested	Moderately interested	Very interested	Extremely interested
Entrepreneur innovation center	<input type="radio"/>				
Food incubation and kitchen center for food entrepreneurs	<input type="radio"/>				
Ethnic food restaurants	<input type="radio"/>				
Local farmers market	<input type="radio"/>				
Retail or vendor spaces for locally produced products	<input type="radio"/>				
Farm to table restaurant	<input type="radio"/>				
A Wifi coffee cafe with printing (including 3D) and copying capabilities	<input type="radio"/>				
Sports bar/restaurant	<input type="radio"/>				
Temporary, daily office space	<input type="radio"/>				
State any other venue idea you may have:	<input type="radio"/>				

Q6 How interested would you be in attending any of the following types of **events** at the Water Works Center?

	Definitely not	Probably not	Might or might not	Probably yes	Definitely yes
A music, arts and wine tasting event	<input type="radio"/>				
Small music, comedy, or storytelling events	<input type="radio"/>				
A local community business mixer	<input type="radio"/>				
A speaker series on local history	<input type="radio"/>				
A local charity event	<input type="radio"/>				
Job and career fair	<input type="radio"/>				
Youth discovery & adventure days	<input type="radio"/>				
Youth motivational sports or celebrity speaker appearance	<input type="radio"/>				
State any other event idea you may have:	<input type="radio"/>				

Q7 How likely will you utilize or go to the new Water Works Center once it has been developed and opened?

- Extremely unlikely
- Somewhat unlikely
- Neither likely nor unlikely
- Somewhat likely
- Extremely likely

Q8 Please rate whether any of the following things would affect your desire to go to the new Water Works Center once it is completed.

	Definitely not	Probably not	Might or might not	Probably yes	Definitely yes
Location	<input type="radio"/>				
Traffic	<input type="radio"/>				
Parking	<input type="radio"/>				
Ability to access the Water Works Center	<input type="radio"/>				
Safety	<input type="radio"/>				
Please state any other things	<input type="radio"/>				

Q9 Please indicate your age

- 0-17
- 18-24
- 25-39
- 40-54
- 55-64
- 65-74
- 75+

Q10 Please indicate your gender.

- Male
- Female
- Non-binary / third gender
- Prefer not to say

Appendix B: Community Survey Factor Analysis and Forecasting Model

Coefficients ^a							
		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
		B	Std. Error	Beta			
1.	1	(Constant)	2.319	.227		10.224	.000
		FACTOR benefits-1	.178	.057	.148	3.144	.002
		factor benefits-2	.122	.038	.135	3.176	.002
		learning factor	-.087	.051	-.087	-1.687	.092
		venue factor 1	.138	.055	.122	2.528	.012
		venue factor 2	-.024	.043	-.027	-.549	.583
		Event factor 1	.131	.061	.116	2.168	.030
		Event factor 2	.078	.038	.089	2.064	.039
		desire factor 1	-.010	.037	-.009	-.267	.790

a. Dependent Variable: Q6

Benefit Factor 1 – includes all benefits, but culinary experience and providing unique visitor destination

Benefit Factor 2- culinary experience and providing unique visitor destination

Learning Factor- includes all the learning events

Venue Factor 1- includes all venues, except innovation center and office space

Venue Factor 2- innovation center and office space

Event Factor 1- includes all but the music, arts and wine tasting event

Event Factor 2- includes the music, arts and wine tasting event

Affecting Desire Factor- includes all the things affecting desire

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.380 ^a	.144	.134	.91104

a. Predictors: (Constant), desire factor 1, Event factor 2, learning factor, factor benefits-2, venue factor 2, FACTOR benefits-1, venue factor 1, Event factor 1

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	95.910	8	11.989	14.444	.000 ^b
	Residual	569.373	686	.830		
	Total	665.283	694			
a. Dependent Variable: Q6						
b. Predictors: (Constant), desire factor 1, Event factor 2, learning factor, factor benefits-2, venue factor 2, FACTOR benefits-1, venue factor 1, Event factor 1						

Appendix C: Intermediate Development Option

Shipping containers as farm space provide several benefits to agricultural growers. First, shipping containers are easy to transport and stack.¹²⁵ It would be relatively easy to place shipping containers in the Water Works parking lot to be utilized while the building is under construction. The size of shipping containers is also beneficial. They are wide enough for growing on each side with a walking path down the middle, tall enough to support vertical farming features, and short enough that only a step stool is needed to reach the top.¹²⁶

Additionally, one major benefit to shipping container farms is that they allow for the creation of controlled environment agriculture (CEA). CEA can control factors that influence crop growth, such as temperature and nutrients, which can allow for a higher output of crops that are also more flavorful and fresher.¹²⁷ However, environmental control that is not well managed will cause problems for the crops to grow. Too much heat and humidity, insufficient lighting, and a lack of proper airflow will have negative effects on crop growth.¹²⁸ The structural integrity of shipping containers can also make environmental control difficult. Because farm containers are usually built with used shipping containers, they often have air leaks and other structural problems that can affect environmental control.¹²⁹

In terms of accessibility and cost, shipping containers are plentiful in supply and relatively inexpensive. Shipping companies are happy to sell their old, unused containers. For example, when a refrigeration shipping container breaks, it is easier and less expensive to sell the broken container than it is to fix it.¹³⁰ Shipping containers are also available as premade farms. A 40-foot container farm costs between \$50 thousand and \$100 thousand.¹³¹

The research team has spoken with NUHUB about this type of operation. If the community is able to provide 10,000 square feet of open-air market space, NUHUB could provide the bulleted list of services:

- Six 20-foot containerized eateries
- One 40-foot containerized beer and refreshment stall
- One 40-foot containerized prep and demo kitchen
- Six 40-foot Better Fresh Farms hydroponics containers
- One 40-foot containerized anaerobic digester to manage food waste and generate energy
- Six farmers market vendor stalls run by Georgia Organics

¹²⁵ Discover Containers. (29 September 2021). *Ultimate Guide to Shipping Container Farms*. <https://www.discovercontainers.com/shipping-container-farms/>

¹²⁶ Ibid, *Ultimate Guide to Shipping Container Farms*.

¹²⁷ Ibid, *Ultimate Guide to Shipping Container Farms*.

¹²⁸ Michael, C. (16 March 2017). *The Good, the Bad, and the Ugly of Container Farms*. *Medium*. <https://medium.com/bright-agrotech/the-good-the-bad-and-the-ugly-of-container-farms-d32f4f13f31b>

¹²⁹ *What is Container Farming?* (n.d.). Urban Vine. Retrieved from <https://www.urbanvine.co/blog/container-farming>

¹³⁰ Michael, C. (16 March 2017). *The Good, the Bad, and the Ugly of Container Farms*. *Medium*. <https://medium.com/bright-agrotech/the-good-the-bad-and-the-ugly-of-container-farms-d32f4f13f31b>

¹³¹ Ibid, *Ultimate Guide to Shipping Container Farms*

The research understands that the only “cost” required by the City for this proposal is to provide the 10,000 square feet for NUHUB operations, but the City and NUHUB will need to negotiate appropriate terms if this plan moves forward.

NUHUB anticipates that 25 percent of visitors at arena events would visit the marketplace. Assuming that the arena holds four events per week and the average spending at a marketplace is \$25 per visit, they expect over \$7.1 million in revenue from these arena event attendees. Anticipating an average of \$25 spending per visit across the board, NUHUB projects 2.5 percent of Savannah’s annual tourists would visit the market leading to over \$8.7 million in revenue. Additionally, assuming 15 percent of Savannah’s downtown population will visit the marketplace twice per week, the projected revenue from locals is more than \$7.7 million. The total expected revenue is \$23.6 million, compared to the annual grocery store sales in Savannah at \$52 million.

Appendix D: Retail and Food Services Industry by Individual NAICS Code

Table 12: Employment in Chatham County by NAICS Code					
	2016	2017	2018	2019	2020
Retail Trade (44)	19,281	19,517	19,989	19,782	18,980
Motor Vehicle and Parts Dealers (441)	2,835	2,872	2,971	2,992	2,844
Furniture and Home Furnishings Stores (442)	638	682	725	915	717
Electronics and Appliance Stores (443)	569	616	558	561	738
Building Material and Garden Equipment and Supplies Dealers (444)	1,463	1,505	1,531	1,464	1,574
Food and Beverage Stores (445)	3,505	3,601	3,597	3,486	3,648
Health and Personal Care Stores (446)	1,016	1,056	1,164	1,160	1,133
Gasoline Stations (447)	1,128	1,134	1,139	1,163	1,253
Clothing and Clothing Accessories Stores (448)	2,333	2,360	2,435	2,361	1,922
Sporting Goods, Hobby, Musical Instrument, and Book Stores (451)	818	833	784	729	622
General Merchandise Stores (452)	3,668	3,502	3,534	3,367	3,111
Miscellaneous Store Retailers (453)	1,036	1,050	1,092	1,123	961
Nonstore Retailers (454)	274	304	461	463	457
Food Services and Drinking Places (722)	17,615	17,771	18,153	18,272	15,148
Special Food Services (7223)	670	671	648	722	582
Drinking Places (Alcoholic Beverages) (7224)	383	409	445	414	403
Restaurants and Other Eating Places (7225)	16,562	16,692	17,060	17,137	14,164
JobsEQ,					

Table 13: Employment in City of Savannah by NAICS Code					
	2016	2017	2018	2019	2020
Retail Trade (44)	12,566	12,656	12,772	12,431	11,813
Motor Vehicle and Parts Dealers (441)	1,876	1,917	1,986	1,957	1,874
Furniture and Home Furnishings Stores (442)	497	506	508	642	511
Electronics and Appliance Stores (443)	439	480	422	395	479
Building Material and Garden Equipment and Supplies Dealers (444)	867	903	917	821	882
Food and Beverage Stores (445)	2,121	2,143	2,148	2,070	2,153
Health and Personal Care Stores (446)	749	751	783	767	746
Gasoline Stations (447)	511	534	595	602	650
Clothing and Clothing Accessories Stores (448)	1,531	1,485	1,482	1,420	1,156
Sporting Goods, Hobby, Musical Instrument, and Book Stores (451)	649	631	567	519	438
General Merchandise Stores (452)	2,370	2,359	2,346	2,209	2,006
Miscellaneous Store Retailers (453)	799	780	784	798	690
Nonstore Retailers (454)	156	168	234	231	229
Food Services and Drinking Places (722)	11,803	11,720	12,066	12,119	10,085
Special Food Services (7223)	476	442	427	504	409
Drinking Places (Alcoholic Beverages) (7224)	318	322	355	313	309
Restaurants and Other Eating Places (7225)	11,009	10,956	11,285	11,301	9,367
<i>Source: JobsEQ</i>					

Table 14: Retail Opportunity Gap: 1-mile Radius

	2022 Demand (\$)	2022 Supply (\$)	Opportunity Gap/Surplus (\$)
Totals			
Total retail trade including food and drink (NAICS 44, 45 and 722)	159,750,419	180,749,012	-20,998,593
Total retail trade (NAICS 44 and 45)	143,784,237	153,312,477	-9,528,241
Motor Vehicle and Parts Dealers			
Motor vehicle and parts dealers (NAICS 441)	35,130,440	26,585,757	8,544,684
Automobile dealers (NAICS 4411)	30,876,043	26,585,757	4,290,286
New car dealers (NAICS 44111)	27,427,903	26,585,757	842,146
Used car dealers (NAICS 44112)	3,448,140	0	3,448,140
Other motor vehicle dealers (NAICS 4412)	1,948,532	0	1,948,532
Recreational vehicle dealers (NAICS 44121)	610,644	0	610,644
Motorcycle, boat, and other motor vehicle dealers (NAICS 44122)	1,337,887	0	1,337,887
Boat dealers (NAICS 441222)	367,543	0	367,543
Motorcycle, ATV, and all other motor vehicle dealers (NAICS 441228)	970,345	0	970,345
Automotive parts, accessories, and tire stores (NAICS 4413)	2,305,866	0	2,305,866
Automotive parts and accessories stores (NAICS 44131)	1,457,614	0	1,457,614
Tire dealers (NAICS 44132)	848,252	0	848,252
Furniture and Home Furnishings Stores			
Furniture and home furnishings stores (NAICS 442)	2,269,311	7,596,090	-5,326,779
Furniture stores (NAICS 4421)	1,402,216	4,556,230	-3,154,014
Home furnishings stores (NAICS 4422)	867,095	3,039,860	-2,172,766
Floor covering stores (NAICS 44221)	221,144	3,039,860	-2,818,716
Other home furnishings stores (NAICS 44229)	645,951	0	645,951
Window treatment stores (NAICS 442291)	38,015	0	38,015
All other home furnishings stores (NAICS 442299)	607,935	0	607,935
Electronics and Appliance Stores			
Electronics and appliance stores (NAICS 443)	1,814,349	1,872,467	-58,118
Household appliance stores (NAICS 443141)	466,651	1,498,107	-1,031,456
Electronics stores (NAICS 443142)	1,347,698	374,360	973,338
Building Material and Garden Equipment and Supplies Dealers			
Building material and garden equipment and supplies dealers (NAICS 444)	10,135,299	20,649,399	-10,514,101
Building material and supplies dealers (NAICS 4441)	8,912,142	20,649,399	-11,737,257
Home centers (NAICS 44411)	4,881,220	683,229	4,197,991
Paint and wallpaper stores (NAICS 44412)	299,565	0	299,565
Hardware stores (NAICS 44413)	772,058	0	772,058
Other building material dealers (NAICS 44419)	2,959,300	19,966,170	-17,006,870
Lawn and garden equipment and supplies stores (NAICS 4442)	1,223,156	0	1,223,156

Outdoor power equipment stores (NAICS 44421)	243,903	0	243,903
Nursery, garden center, and farm supply stores (NAICS 44422)	979,253	0	979,253
Food and Beverage Stores			
Food and beverage stores (NAICS 445)	21,170,761	39,479,013	-18,308,251
Grocery stores (NAICS 4451)	19,136,431	36,630,141	-17,493,710
Supermarkets and other grocery (except convenience) stores (NAICS 44511)	18,269,577	36,620,083	-18,350,506
Convenience stores (NAICS 44512)	866,854	10,058	856,796
Specialty food stores (NAICS 4452)	552,218	659,212	-106,994
Meat markets (NAICS 44521)	167,387	0	167,387
Fish and seafood markets (NAICS 44522)	65,742	659,212	-593,470
Fruit and vegetable markets (NAICS 44523)	114,105	0	114,105
Other specialty food stores (NAICS 44529)	204,984	0	204,984
All other specialty food stores (NAICS 445299)	96,162	486,476	96,162
Beer, wine, and liquor stores (NAICS 4453)	1,482,112	2,189,659	-707,547
Health and Personal Care Stores			
Health and personal care stores (NAICS 446)	9,108,345	6,072,173	3,036,172
Pharmacies and drug stores (NAICS 44611)	7,954,528	6,072,173	1,882,354
Cosmetics, beauty supplies, and perfume stores (NAICS 44612)	528,081	0	528,081
Optical goods stores (NAICS 44613)	206,762	0	206,762
Other health and personal care stores (NAICS 44619)	418,975	0	418,975
Food (health) supplement stores (NAICS 446191)	147,746	0	147,746
All other health and personal care stores (NAICS 446199)	271,229	0	271,229
Gasoline Stations			
Gasoline stations (NAICS 447)	12,471,396	13,300,967	-829,571

Retail Opportunity Gap (1): 1 Mile Radius Continued

Table 15: Retail Opportunity Gap: 2-mile Radius

	2022 Demand (\$)	2022 Supply (\$)	Opportunity Gap/Surplus (\$)
Totals			
Total retail trade including food and drink (NAICS 44, 45 and 722)	585,797,300	1,343,412,724	-757,615,424
Total retail trade (NAICS 44 and 45)	525,766,599	1,069,640,909	-543,874,310
Motor Vehicle and Parts Dealers			
Motor vehicle and parts dealers (NAICS 441)	130,726,438	146,021,092	-15,294,654
Automobile dealers (NAICS 4411)	114,803,191	129,278,617	-14,475,426
New car dealers (NAICS 44111)	101,974,190	129,278,617	-27,304,427
Used car dealers (NAICS 44112)	12,829,001	0	12,829,001
Other motor vehicle dealers (NAICS 4412)	7,466,644	6,613,510	853,134
Recreational vehicle dealers (NAICS 44121)	2,384,304	597,727	1,786,577
Motorcycle, boat, and other motor vehicle dealers (NAICS 44122)	5,082,340	6,015,783	-933,443
Boat dealers (NAICS 441222)	1,432,831	2,309,546	-876,715
Motorcycle, ATV, and all other motor vehicle dealers (NAICS 441228)	3,649,510	3,706,237	-56,727
Automotive parts, accessories, and tire stores (NAICS 4413)	8,456,603	10,128,964	-1,672,361
Automotive parts and accessories stores (NAICS 44131)	5,346,103	9,773,020	-4,426,917
Tire dealers (NAICS 44132)	3,110,500	355,945	2,754,555
Furniture and Home Furnishings Stores			
Furniture and home furnishings stores (NAICS 442)	8,523,676	45,119,986	-36,596,309
Furniture stores (NAICS 4421)	5,288,055	27,229,510	-21,941,455
Home furnishings stores (NAICS 4422)	3,235,621	17,890,476	-14,654,855
Floor covering stores (NAICS 44221)	838,361	17,108,418	-16,270,057
Other home furnishings stores (NAICS 44229)	2,397,261	782,058	1,615,203
Window treatment stores (NAICS 442291)	138,349	0	138,349
All other home furnishings stores (NAICS 442299)	2,258,912	782,058	1,476,854
Electronics and Appliance Stores			
Electronics and appliance stores (NAICS 443)	6,640,758	31,824,065	-25,183,308
Household appliance stores (NAICS 443141)	1,706,947	19,750,238	-18,043,290
Electronics stores (NAICS 443142)	4,933,810	12,073,828	-7,140,017
Building Material and Garden Equipment and Supplies Dealers			
Building material and garden equipment and supplies dealers (NAICS 444)	37,859,052	71,567,280	-33,708,228
Building material and supplies dealers (NAICS 4441)	33,270,107	66,707,127	-33,437,020
Home centers (NAICS 44411)	18,224,649	16,212,680	2,011,970
Paint and wallpaper stores (NAICS 44412)	1,118,689	1,359,565	-240,875
Hardware stores (NAICS 44413)	2,884,517	2,213,862	670,655
Other building material dealers (NAICS 44419)	11,042,251	46,921,021	-35,878,769
Lawn and garden equipment and supplies stores (NAICS 4442)	4,588,945	4,860,153	-271,208

Outdoor power equipment stores (NAICS 44421)	917,998	2,447,897	-1,529,899
Nursery, garden center, and farm supply stores (NAICS 44422)	3,670,947	2,412,257	1,258,691
Food and Beverage Stores			
Food and beverage stores (NAICS 445)	76,044,943	215,131,751	-139,086,808
Grocery stores (NAICS 4451)	68,450,910	178,084,845	-109,633,935
Supermarkets and other grocery (except convenience) stores (NAICS 44511)	65,357,850	158,376,629	-93,018,778
Convenience stores (NAICS 44512)	3,093,060	19,708,217	-16,615,157
Specialty food stores (NAICS 4452)	1,962,994	14,190,289	-12,227,295
Meat markets (NAICS 44521)	594,757	472,058	122,699
Fish and seafood markets (NAICS 44522)	233,664	9,188,125	-8,954,461
Fruit and vegetable markets (NAICS 44523)	406,019	1,017,470	-611,451
Other specialty food stores (NAICS 44529)	728,553	3,512,636	-2,784,083
All other specialty food stores (NAICS 445299)	342,093	392,782	-50,689
Beer, wine, and liquor stores (NAICS 4453)	5,631,039	22,856,617	-17,225,578
Health and Personal Care Stores			
Health and personal care stores (NAICS 446)	32,989,268	46,265,659	-13,276,391
Pharmacies and drug stores (NAICS 44611)	28,801,190	38,024,849	-9,223,660
Cosmetics, beauty supplies, and perfume stores (NAICS 44612)	1,916,540	6,826,491	-4,909,951
Optical goods stores (NAICS 44613)	752,668	0	752,668
Other health and personal care stores (NAICS 44619)	1,518,871	1,414,318	104,552
Food (health) supplement stores (NAICS 446191)	534,695	1,348,483	-813,788
All other health and personal care stores (NAICS 446199)	984,176	65,835	918,341
Gasoline Stations			
Gasoline stations (NAICS 447)	44,708,946	75,001,541	-30,292,595

Retail Opportunity Gap (1): 2 Mile Radius Continued

Table 16: Retail Opportunity Gap: 3-mile Radius

	2022 Demand (\$)	2022 Supply (\$)	Opportunity Gap/Surplus (\$)
Totals			
Total retail trade including food and drink (NAICS 44, 45 and 722)	1,002,297,201	1,784,141,312	-781,844,111
Total retail trade (NAICS 44 and 45)	901,432,446	1,457,323,747	-555,891,302
Motor Vehicle and Parts Dealers			
Motor vehicle and parts dealers (NAICS 441)	225,097,857	263,432,127	-38,334,270
Automobile dealers (NAICS 4411)	197,319,882	230,971,853	-33,651,971
New car dealers (NAICS 44111)	175,273,100	230,971,853	-55,698,754
Used car dealers (NAICS 44112)	22,046,783	0	22,046,783
Other motor vehicle dealers (NAICS 4412)	13,180,526	9,667,437	3,513,089
Recreational vehicle dealers (NAICS 44121)	4,279,308	786,344	3,492,963
Motorcycle, boat, and other motor vehicle dealers (NAICS 44122)	8,901,219	8,881,093	20,126
Boat dealers (NAICS 441222)	2,566,880	3,953,318	-1,386,437
Motorcycle, ATV, and all other motor vehicle dealers (NAICS 441228)	6,334,338	4,927,775	1,406,563
Automotive parts, accessories, and tire stores (NAICS 4413)	14,597,448	22,792,837	-8,195,388
Automotive parts and accessories stores (NAICS 44131)	9,228,137	21,643,922	-12,415,785
Tire dealers (NAICS 44132)	5,369,311	1,148,914	4,220,397
Furniture and Home Furnishings Stores			
Furniture and home furnishings stores (NAICS 442)	14,522,434	49,386,028	-34,863,594
Furniture stores (NAICS 4421)	9,016,824	27,505,634	-18,488,810
Home furnishings stores (NAICS 4422)	5,505,610	21,880,394	-16,374,784
Floor covering stores (NAICS 44221)	1,416,365	21,098,336	-19,681,971
Other home furnishings stores (NAICS 44229)	4,089,245	782,058	3,307,187
Window treatment stores (NAICS 442291)	235,488	0	235,488
All other home furnishings stores (NAICS 442299)	3,853,756	782,058	3,071,698
Electronics and Appliance Stores			
Electronics and appliance stores (NAICS 443)	11,399,125	34,081,715	-22,682,590
Household appliance stores (NAICS 443141)	2,962,960	22,007,887	-19,044,927
Electronics stores (NAICS 443142)	8,436,165	12,073,828	-3,637,663
Building Material and Garden Equipment and Supplies Dealers			
Building material and garden equipment and supplies dealers (NAICS 444)	65,996,408	107,817,469	-41,821,061
Building material and supplies dealers (NAICS 4441)	57,961,091	102,519,885	-44,558,794
Home centers (NAICS 44411)	31,738,781	32,500,101	-761,320
Paint and wallpaper stores (NAICS 44412)	1,948,683	1,501,113	447,571
Hardware stores (NAICS 44413)	4,996,157	2,219,372	2,776,785
Other building material dealers (NAICS 44419)	19,277,469	66,299,299	-47,021,830
Lawn and garden equipment and supplies stores (NAICS 4442)	8,035,318	5,297,584	2,737,733

Outdoor power equipment stores (NAICS 44421)	1,613,584	2,535,833	-922,249
Nursery, garden center, and farm supply stores (NAICS 44422)	6,421,733	2,761,751	3,659,982
Food and Beverage Stores			
Food and beverage stores (NAICS 445)	129,725,684	311,557,763	-181,832,080
Grocery stores (NAICS 4451)	116,875,436	272,854,974	-155,979,538
Supermarkets and other grocery (except convenience) stores (NAICS 44511)	111,664,237	248,484,535	-136,820,299
Convenience stores (NAICS 44512)	5,211,199	24,370,439	-19,159,240
Specialty food stores (NAICS 4452)	3,353,042	14,861,891	-11,508,849
Meat markets (NAICS 44521)	1,015,716	472,058	543,658
Fish and seafood markets (NAICS 44522)	399,035	9,858,608	-9,459,573
Fruit and vegetable markets (NAICS 44523)	693,970	1,017,470	-323,500
Other specialty food stores (NAICS 44529)	1,244,321	3,513,754	-2,269,434
All other specialty food stores (NAICS 445299)	584,085	392,782	191,303
Beer, wine, and liquor stores (NAICS 4453)	9,497,206	23,840,899	-14,343,693
Health and Personal Care Stores			
Health and personal care stores (NAICS 446)	56,798,501	73,573,589	-16,775,088
Pharmacies and drug stores (NAICS 44611)	49,559,196	65,044,278	-15,485,083
Cosmetics, beauty supplies, and perfume stores (NAICS 44612)	3,306,027	7,114,993	-3,808,965
Optical goods stores (NAICS 44613)	1,314,492	0	1,314,492
Other health and personal care stores (NAICS 44619)	2,618,787	1,414,318	1,204,468
Food (health) supplement stores (NAICS 446191)	921,035	1,348,483	-427,448
All other health and personal care stores (NAICS 446199)	1,697,751	65,835	1,631,916
Gasoline Stations			
Gasoline stations (NAICS 447)	75,912,647	104,489,198	-28,576,551

Retail Opportunity Gap (1): 3 Mile Radius Continued

Table 17: Retail Opportunity Gap 2: 1-mile radius

	2022 Demand (\$)	2022 Supply (\$)	Opportunity Gap/Surplus (\$)
Clothing and Clothing Accessories Stores			
Clothing and clothing accessories stores (NAICS 448)	4,924,753	7,776,639	-2,851,886
Clothing stores (NAICS 4481)	3,270,865	7,496,032	-4,225,167
Men's clothing stores (NAICS 44811)	146,873	788,725	-641,851
Women's clothing stores (NAICS 44812)	583,178	135,492	447,686
Children's and infants' clothing stores (NAICS 44813)	112,093	142,168	-30,074
Family clothing stores (NAICS 44814)	1,971,738	5,547,247	-3,575,509
Clothing accessories stores (NAICS 44815)	157,101	104,620	52,481
Other clothing stores (NAICS 44819)	299,882	777,781	-477,900
Shoe stores (NAICS 4482)	715,307	0	715,307
Jewelry, luggage, and leather goods stores (NAICS 4483)	938,581	280,606	657,974
Jewelry stores (NAICS 44831)	582,200	0	582,200
Luggage and leather goods stores (NAICS 44832)	356,381	280,606	75,774
Sporting Goods, Hobby, Musical Instrument, and Book Stores			
Sporting goods, hobby, musical instrument, and bookstores (NAICS 451)	1,672,001	2,689,649	-1,017,647
Sporting goods, hobby, and musical instrument stores (NAICS 4511)	1,467,105	2,450,693	-983,588
Sporting goods stores (NAICS 45111)	987,202	1,532,940	-545,738
Hobby, toy, and game stores (NAICS 45112)	327,473	917,753	-590,280
Sewing, needlework, and piece goods stores (NAICS 45113)	56,550	0	56,550
Musical instrument and supplies stores (NAICS 45114)	95,880	0	95,880
Book stores and news dealers (NAICS 4512)	204,896	238,956	-34,060
Book stores (NAICS 451211)	189,386	238,956	-49,570
News dealers and newsstands (NAICS 451212)	15,510	0	15,510
General Merchandise Stores			
General merchandise stores (NAICS 452)	18,262,755	21,016,316	-2,753,561
Department stores (NAICS 4522)	2,128,008	0	2,128,008
Other general merchandise stores (NAICS 4523)	16,134,747	21,016,316	-4,881,569
Warehouse clubs and supercenters (NAICS 452311)	14,622,945	21,016,316	-6,393,370
All other general merchandise stores (NAICS 452319)	1,511,802	0	1,511,802
Miscellaneous Store Retailers			
Miscellaneous store retailers (NAICS 453)	3,013,499	4,295,270	-1,281,771
Florists (NAICS 4531)	121,190	0	121,190
Office supplies, stationery, and gift stores (NAICS 4532)	603,372	1,242,814	-639,441
Office supplies and stationery stores (NAICS 45321)	250,763	1,242,814	-992,050
Gift, novelty, and souvenir stores (NAICS 45322)	352,609	0	352,609
Used merchandise stores (NAICS 4533)	408,639	901,592	-492,953
Other miscellaneous store retailers (NAICS 4539)	1,880,297	2,150,864	-270,566
Pet and pet supplies stores (NAICS 45391)	534,599	1,954,388	-1,419,789

Art dealers (NAICS 45392)	243,492	0	243,492
Manufactured (mobile) home dealers (NAICS 45393)	119,268	0	119,268
All other miscellaneous store retailers (NAICS 45399)	982,939	196,476	786,463
Tobacco stores (NAICS 453991)	446,149	196,476	249,674
All other miscellaneous store retailers (except tobacco stores) (NAICS 453998)	536,789	0	536,789
Non-store Retailers			
Non-store retailers (NAICS 454)	23,811,327	1,978,739	21,832,588
Electronic shopping and mail-order houses (NAICS 4541)	22,566,948	1,978,739	20,588,209
Vending machine operators (NAICS 4542)	174,845	0	174,845
Direct selling establishments (NAICS 4543)	1,069,534	0	1,069,534
Fuel dealers (NAICS 45431)	512,205	0	512,205
Other direct selling establishments (NAICS 45439)	557,329	0	557,329
Food Services and Drinking Places			
Food services and drinking places (NAICS 722)	15,966,182	27,436,534	-11,470,352
Special food services (NAICS 7223)	1,285,755	2,483,247	-1,197,491
Food service contractors (NAICS 72231)	1,014,103	2,099,825	-1,085,721
Caterers (NAICS 72232)	247,429	298,155	-50,726
Mobile food services (NAICS 72233)	24,223	85,267	-61,044
Drinking places (alcoholic beverages) (NAICS 7224)	439,577	0	439,577
Restaurants and other eating places (NAICS 7225)	14,240,850	24,953,288	-10,712,438
Full-service restaurants (NAICS 722511)	6,997,362	9,958,908	-2,961,545
Limited-service restaurants (NAICS 722513)	6,143,870	13,455,374	-7,311,504
Cafeterias, grill buffets, and buffets (NAICS 722514)	156,574	1,539,006	-1,382,432
Snack and non-alcoholic beverage bars (NAICS 722515)	943,044	0	943,044

Retail Opportunity Gap (2): 1 Mile Radius Continued

Table 18: Retail Opportunity Gap 2: 2-mile radius

	2022 Demand (\$)	2022 Supply (\$)	Opportunity Gap/Surplus (\$)
Clothing and Clothing Accessories Stores			
Clothing and clothing accessories stores (NAICS 448)	18,062,178	109,567,355	-91,505,177
Clothing stores (NAICS 4481)	11,982,600	81,247,760	-69,265,160
Men's clothing stores (NAICS 44811)	548,585	5,883,199	-5,334,613
Women's clothing stores (NAICS 44812)	2,161,055	3,928,632	-1,767,577
Children's and infants' clothing stores (NAICS 44813)	359,575	3,898,891	-3,539,316
Family clothing stores (NAICS 44814)	7,213,336	57,355,928	-50,142,592
Clothing accessories stores (NAICS 44815)	587,446	4,834,572	-4,247,126
Other clothing stores (NAICS 44819)	1,112,602	5,346,539	-4,233,937
Shoe stores (NAICS 4482)	2,554,778	7,075,220	-4,520,442
Jewelry, luggage, and leather goods stores (NAICS 4483)	3,524,800	21,244,375	-17,719,575
Jewelry stores (NAICS 44831)	2,215,502	8,956,532	-6,741,029
Luggage and leather goods stores (NAICS 44832)	1,309,297	12,287,843	-10,978,546
Sporting Goods, Hobby, Musical Instrument, and Book Stores			
Sporting goods, hobby, musical instrument, and bookstores (NAICS 451)	6,171,641	38,499,886	-32,328,245
Sporting goods, hobby, and musical instrument stores (NAICS 4511)	5,446,368	28,225,195	-22,778,826
Sporting goods stores (NAICS 45111)	3,719,584	16,878,092	-13,158,508
Hobby, toy, and game stores (NAICS 45112)	1,176,341	11,319,748	-10,143,407
Sewing, needlework, and piece goods stores (NAICS 45113)	206,369	0	206,369
Musical instrument and supplies stores (NAICS 45114)	344,073	27,354	316,719
Book stores and news dealers (NAICS 4512)	725,273	10,274,691	-9,549,419
Book stores (NAICS 451211)	669,869	10,032,830	-9,362,961
News dealers and newsstands (NAICS 451212)	55,404	241,862	-186,457
General Merchandise Stores			
General merchandise stores (NAICS 452)	65,845,953	134,851,616	-69,005,663
Department stores (NAICS 4522)	7,737,534	13,213,447	-5,475,913
Other general merchandise stores (NAICS 4523)	58,108,419	121,638,169	-63,529,749
Warehouse clubs and supercenters (NAICS 452311)	52,628,429	113,784,641	-61,156,212
All other general merchandise stores (NAICS 452319)	5,479,991	7,853,528	-2,373,537
Miscellaneous Store Retailers			
Miscellaneous store retailers (NAICS 453)	11,074,214	57,819,595	-46,745,381
Florists (NAICS 4531)	455,822	3,111,203	-2,655,381
Office supplies, stationery, and gift stores (NAICS 4532)	2,214,343	19,128,078	-16,913,735
Office supplies and stationery stores (NAICS 45321)	932,739	11,139,036	-10,206,297
Gift, novelty, and souvenir stores (NAICS 45322)	1,281,604	7,989,041	-6,707,438
Used merchandise stores (NAICS 4533)	1,497,082	13,548,193	-12,051,111
Other miscellaneous store retailers (NAICS 4539)	6,906,967	22,032,122	-15,125,155

Pet and pet supplies stores (NAICS 45391)	2,006,825	15,420,512	-13,413,688
Art dealers (NAICS 45392)	917,676	1,955,702	-1,038,026
Manufactured (mobile) home dealers (NAICS 45393)	459,217	1,588,975	-1,129,758
All other miscellaneous store retailers (NAICS 45399)	3,523,249	3,066,932	456,317
Tobacco stores (NAICS 453991)	1,540,053	2,340,910	-800,856
All other miscellaneous store retailers (except tobacco stores) (NAICS 453998)	1,983,196	726,022	1,257,173
Non-store Retailers			
Non-store retailers (NAICS 454)	87,119,531	97,971,083	-10,851,552
Electronic shopping and mail-order houses (NAICS 4541)	82,630,651	95,817,283	-13,186,632
Vending machine operators (NAICS 4542)	626,569	3,025	623,544
Direct selling establishments (NAICS 4543)	3,862,311	2,150,776	1,711,535
Fuel dealers (NAICS 45431)	1,834,848	132,293	1,702,555
Other direct selling establishments (NAICS 45439)	2,027,463	2,018,483	8,980
Food Services and Drinking Places			
Food services and drinking places (NAICS 722)	60,030,701	273,771,815	-213,741,114
Special food services (NAICS 7223)	4,821,661	29,017,424	-24,195,763
Food service contractors (NAICS 72231)	3,806,726	28,415,470	-24,608,744
Caterers (NAICS 72232)	924,622	468,088	456,534
Mobile food services (NAICS 72233)	90,313	133,865	-43,553
Drinking places (alcoholic beverages) (NAICS 7224)	1,755,186	3,679,137	-1,923,951
Restaurants and other eating places (NAICS 7225)	53,453,855	241,075,255	-187,621,400
Full-service restaurants (NAICS 722511)	26,432,859	131,509,024	-105,076,166
Limited-service restaurants (NAICS 722513)	22,924,350	78,543,119	-55,618,769
Cafeterias, grill buffets, and buffets (NAICS 722514)	584,280	11,553,083	-10,968,802
Snack and non-alcoholic beverage bars (NAICS 722515)	3,512,365	19,470,029	-15,957,664

Retail Opportunity Gap (2): 2 Mile Radius Continued

Table19: Retail Opportunity Gap 3: 3-mile radius

	2022 Demand (\$)	2022 Supply (\$)	Opportunity Gap/Surplus (\$)
Clothing and Clothing Accessories Stores			
Clothing and clothing accessories stores (NAICS 448)	30,683,706	116,552,342	-85,868,636
Clothing stores (NAICS 4481)	20,375,039	86,708,221	-66,333,182
Men's clothing stores (NAICS 44811)	923,478	6,300,782	-5,377,304
Women's clothing stores (NAICS 44812)	3,664,971	4,258,125	-593,155
Children's and infants' clothing stores (NAICS 44813)	637,471	4,937,205	-4,299,734
Family clothing stores (NAICS 44814)	12,269,663	59,071,668	-46,802,005
Clothing accessories stores (NAICS 44815)	993,406	5,698,713	-4,705,308
Other clothing stores (NAICS 44819)	1,886,051	6,441,728	-4,555,677
Shoe stores (NAICS 4482)	4,349,124	7,531,366	-3,182,242
Jewelry, luggage, and leather goods stores (NAICS 4483)	5,959,543	22,312,755	-16,353,212
Jewelry stores (NAICS 44831)	3,743,059	8,956,532	-5,213,472
Luggage and leather goods stores (NAICS 44832)	2,216,484	13,356,223	-11,139,739
Sporting Goods, Hobby, Musical Instrument, and Book Stores			
Sporting goods, hobby, musical instrument, and bookstores (NAICS 451)	10,548,357	42,314,152	-31,765,795
Sporting goods, hobby, and musical instrument stores (NAICS 4511)	9,328,783	31,663,559	-22,334,776
Sporting goods stores (NAICS 45111)	6,340,156	19,915,583	-13,575,427
Hobby, toy, and game stores (NAICS 45112)	2,038,545	11,720,622	-9,682,077
Sewing, needlework, and piece goods stores (NAICS 45113)	361,262	0	361,262
Musical instrument and supplies stores (NAICS 45114)	588,820	27,354	561,466
Book stores and news dealers (NAICS 4512)	1,219,574	10,650,594	-9,431,020
Book stores (NAICS 451211)	1,125,397	10,408,732	-9,283,335
News dealers and newsstands (NAICS 451212)	94,176	241,862	-147,685
General Merchandise Stores			
General merchandise stores (NAICS 452)	112,565,032	185,176,074	-72,611,042
Department stores (NAICS 4522)	13,237,888	20,364,340	-7,126,452
Other general merchandise stores (NAICS 4523)	99,327,144	164,811,734	-65,484,590
Warehouse clubs and supercenters (NAICS 452311)	89,942,357	156,958,206	-67,015,849
All other general merchandise stores (NAICS 452319)	9,384,787	7,853,528	1,531,259
Miscellaneous Store Retailers			
Miscellaneous store retailers (NAICS 453)	18,835,616	62,692,147	-43,856,531
Florists (NAICS 4531)	800,327	3,111,203	-2,310,876
Office supplies, stationery, and gift stores (NAICS 4532)	3,781,289	20,483,374	-16,702,085
Office supplies and stationery stores (NAICS 45321)	1,589,844	12,494,332	-10,904,488
Gift, novelty, and souvenir stores (NAICS 45322)	2,191,445	7,989,041	-5,797,596

Used merchandise stores (NAICS 4533)	2,549,670	14,802,376	-12,252,707
Other miscellaneous store retailers (NAICS 4539)	11,704,331	24,295,194	-12,590,863
Pet and pet supplies stores (NAICS 45391)	3,410,716	17,300,986	-13,890,270
Art dealers (NAICS 45392)	1,554,941	1,955,702	-400,761
Manufactured (mobile) home dealers (NAICS 45393)	818,670	1,588,975	-770,305
All other miscellaneous store retailers (NAICS 45399)	5,920,003	3,449,530	2,470,473
Tobacco stores (NAICS 453991)	2,519,920	2,558,189	-38,269
All other miscellaneous store retailers (except tobacco stores) (NAICS 453998)	3,400,083	891,341	2,508,742
Non-store Retailers			
Non-store retailers (NAICS 454)	149,347,078	106,251,142	43,095,936
Electronic shopping and mail-order houses (NAICS 4541)	141,653,647	104,097,341	37,556,306
Vending machine operators (NAICS 4542)	1,067,127	3,025	1,064,102
Direct selling establishments (NAICS 4543)	6,626,305	2,150,776	4,475,529
Fuel dealers (NAICS 45431)	3,155,830	132,293	3,023,537
Other direct selling establishments (NAICS 45439)	3,470,474	2,018,483	1,451,992
Food Services and Drinking Places			
Food services and drinking places (NAICS 722)	100,864,755	326,817,564	-225,952,809
Special food services (NAICS 7223)	8,106,391	33,525,625	-25,419,234
Food service contractors (NAICS 72231)	6,398,486	32,923,672	-26,525,185
Caterers (NAICS 72232)	1,555,837	468,088	1,087,749
Mobile food services (NAICS 72233)	152,068	133,865	18,203
Drinking places (alcoholic beverages) (NAICS 7224)	2,907,649	3,679,137	-771,488
Restaurants and other eating places (NAICS 7225)	89,850,715	289,612,802	-199,762,088
Full-service restaurants (NAICS 722511)	44,364,286	148,493,646	-104,129,360
Limited-service restaurants (NAICS 722513)	38,587,747	107,826,417	-69,238,670
Cafeterias, grill buffets, and buffets (NAICS 722514)	983,474	13,822,711	-12,839,237
Snack and non-alcoholic beverage bars (NAICS 722515)	5,915,208	19,470,029	-13,554,821

Retail Opportunity Gap (2): 3 Mile Radius Continued