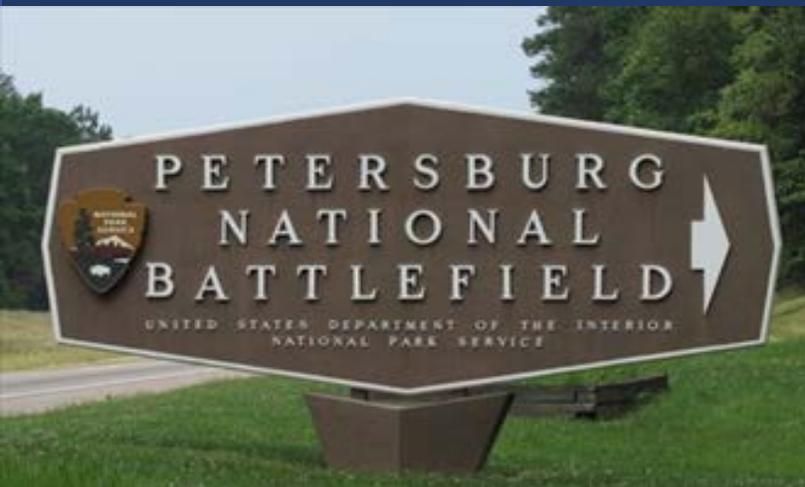




Food Access in Petersburg, Virginia: Final Report and Recommendations



**Prepared for the City of Petersburg by the Fall 2019 Urban
Commercial Revitalization Class**

Master of Urban & Regional Planning Program

L. Douglas Wilder School of Government and Public Affairs

Virginia Commonwealth University

December 9, 2019



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Final Report and Recommendations

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The City of Petersburg

By:
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We would like to thank the various parties that assisted our group in the dissemination of our food access survey. These include the City of Petersburg (Facebook, Instagram, Virginia Issues), Petersburg Region (Facebook, Instagram), the Petersburg Public Library, the Petersburg Chamber of Commerce, the Petersburg Redevelopment & Housing Authority, Progress Index News, Loft Apartments, Pathways, the Boys & Girls Clubs of Metro Richmond: Petersburg Club, United Way of Greater Richmond & Petersburg, and the YMCA of Petersburg.

Most of all, we are grateful to the residents of Petersburg, who took the time to respond to our surveys in order to provide insight on their current dietary and grocery shopping preferences, as well as their desire for improved food accessibility within the city. We hope that our suggestions will assist the City of Petersburg in their efforts to improve the quality of life for all residents.

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Executive Summary

The City of Petersburg, Virginia has long suffered with issues of limited access to food and food insecurity. Food deserts, or areas underserved by retail food options, are prevalent throughout the City. As a result, the Robert Wood Johnson Foundation has ranked the city last of Virginia's 133 counties in their annual health rankings.

For the Fall 2019 semester, students from Virginia Commonwealth University's L. Douglas Wilder School of Government and Public Affairs, through Dr. John Accordino's Urban Commercial Revitalization course focused on planning solutions to address food deserts in commercial areas, with the City of Petersburg being one of our clients. In September, our group - led by Dr. Accordino, visited Petersburg to meet with our client, Reginald Tabor, the City's Director of Economic Development. We joined Mr. Tabor on a tour of Petersburg in order to gain a visual perspective of the challenges faced by residents and government officials to solve the City's food access problem. After further research, our class completed the following tasks to assess the potential for commercial revitalization:

- Collected and analyzed economic and demographic data, including population, race, median household income/age, unemployment rates, and vehicular access;
- Identified the city's Enterprise and Opportunity Zones;
- Located current food retailers in the city;
- Created and distributed a survey to gather community input;
- Identified 3 potential trade areas in the city; and
- Researched 13 potential food access solutions and created a comprehensive report describing those options

The semester's work produced the following five recommendations, discussed in greater detail in this report:

- Introduction of mobile markets/grocery stores;
- Expanded grocery delivery and pick-up services;
- Enhancement and expansion of the products and services of existing retailers;
- Development of partnerships with existing organizations whose missions are similarly focused on addressing the challenge of improving food access; and
- Exploration of opportunities offered by Enterprise and Opportunity Zones

Despite its challenges, there is tremendous potential for the City of Petersburg, Virginia to accomplish its goal of improving food accessibility. With the committed engagement of City agencies and private-sector partners, we are confident that this vision can be realized.

Introduction

Commercial revitalization is one of the most important aspects of urban and regional planning. A viable commercial district is the bedrock of a healthy community, and enhancing the vitality of urban and rural commercial districts is a crucial part of community development. However, changes in the retail sector, especially the rise of Internet retail, necessitate a fresh approach to commercial district planning.

One aspect of commercial district vitality that has seen a resurgence of interest in recent years is food, specifically access to healthy retail food options. Not only do food outlets such as supermarkets, grocery stores, convenience stores, and farmers markets serve vital human needs, they also serve as the economic anchor and an informal social gathering place of a commercial district. Over the past century, however, an increase in the concentration of the retail food industry (and increasing economies of scale), along with demographic shifts and other changes, have created “food deserts” – areas that are underserved by retail food options.

The U.S. Department of Agriculture’s Economic Research Service (USDA) (2019) suggests measurements of access to healthy food include the following indicators: 1) accessibility to sources of healthy food, as measured by distance to a store or by the number of stores in an area; 2) individual-level resources affecting accessibility, such as family income or vehicle availability, and 3) neighborhood-level indicators of resources, such as the average income of the neighborhood and the availability of public transportation.

According to EcoDistricts (2016), a food desert is a community with more than 20 percent of residents living below the poverty threshold and at least 33 percent of the population living more than a mile from a supermarket. A more complex USDA measure accounts for the fact that community members with higher incomes can reside in a food desert, as well. This measure defines a census tract as low access if 1) at least 100 households reside more than one-half mile from the nearest supermarket and have no access to a vehicle; or 2) if at least 500 people or 33 percent of the population live more than 20 miles from the nearest supermarket, regardless of vehicle access (U.S. Department of Agriculture, 2019).

The City of Petersburg, Virginia, is a community that struggles with issues of low access to food and food insecurity. The problem of food deserts within the city has been prominent for many years; in fact, the Robert Wood Johnson Foundation ranked the city last of Virginia’s 133 counties in their annual health rankings. Petersburg’s history provides some clues regarding the origin of its food access problems, and its rich culture and pattern of economic prosperity offers it the potential to reclaim its legacy as a great southern city.

Established in 1748 on the heels of a rapidly expanding tobacco industry, Petersburg became a hub for trade and commercial activity. Located at the fall of the Appomattox River, its proximity to a water route allowed the city to serve as a critical state logistics center for nearly a century; in addition to tobacco, the economy flourished in areas such as railroads and manufacturing. Cultural advancements were equally significant—following the Revolutionary War, Petersburg was home to one of America’s oldest free African-American settlements, located on Pocahontas Island.

However, the after-effects of the Civil War took a toll on every aspect of the city. Prior to the Confederate surrender that ended the war, Petersburg was largely abandoned, and after the war, Richmond became the logistical and shipping center of Virginia. Although the establishment of several retail industries brought another period of prosperity, Petersburg’s economy weakened at the start of the 20th century and the population declined, primarily due to the departure of upper- and middle-income residents, leaving behind a large population of low-income citizens. These economic and demographic realities contribute to the problem of affordable access to food.

As part of its efforts to address the food access problem, the City’s Department of Economic Development, led by Reginald Tabor, partnered with a team of students from Virginia Commonwealth University’s L. Douglas Wilder School of Government and Public Affairs during the fall 2019 semester. These students, part of Dr. John Accordino’s Urban Commercial Revitalization course, worked with Mr. Tabor and others to become acquainted with the city’s issues, learn about its economy and demographics, explore existing efforts to address the food access problem, and discover the needs and desires of Petersburg residents for grocery shopping opportunities.

A primary goal of the project was to analyze the existing consumer market for food products in Petersburg to discover unmet needs and future opportunities and to provide City officials with action alternatives as a basis for planning. The two components of this market analysis are the “demand-side,” or the needs, preferences, and shopping behavior of residents, and the “supply-side,” or the universe of existing retail and other food suppliers. Our report is structured as follows: 1) “Demand-Side Analysis,” including Petersburg’s demographics and economics, characteristics for three trade areas, and survey data from Petersburg’s residents; 2) “Supply-Side Analysis,” including maps of Petersburg’s existing food retailers, and a comprehensive report on 13 retail and other food supply options; 3) a brief description of existing efforts to address food access in Petersburg; 4) recommendations; 5) summary and conclusion; 6) references; and 7) appendices.

The research began with a tour of Petersburg to gain a visual and geospatial perspective of the challenges faced by residents in different neighborhoods, and those of government officials and private-sector organizations, to address the city's food access problems. The class also completed the following tasks to assess the potential for commercial revitalization within the context of food access:

- Collected and analyzed economic and demographic data, including population, race, median household income/age, unemployment rates, and vehicular access;
- Identified the city's Enterprise and Opportunity Zones;
- Located current food retailers in the city;
- Created and distributed a survey to gather community input;
- Identified 3 potential trade areas in the city; and
- Researched 13 potential food access solutions and created a comprehensive report describing those options

The semester's work produced the following five recommendations, discussed in greater detail in this report:

- Introduction of mobile markets/grocery stores;
- Expanded grocery delivery and pick-up services;
- Enhancement and expansion of the products and services of existing retailers;
- Development of partnerships with existing organizations whose missions are similarly focused on addressing the challenge of improving food access; and
- Exploration of opportunities offered by Enterprise and Opportunity Zones

The City of Petersburg's Department of Economic Development, by engaging and partnering with the private sector and others, has great potential to help close the food accessibility gap and improve the quality of life for all residents. Our recommendations can help guide the city and its agencies, and the merchants, residents, and other stakeholders toward realizing the vision of a revitalized, prosperous, and inclusive Petersburg, Virginia.

Demand-Side Analysis

Petersburg Demographics and Economics

Population

Petersburg has a total population of 32,037 (2017), a decrease of 289 since 2013. While decreasing in total population, many of its block groups have seen significant population increases. Block groups in the northwest along the Appomattox River have seen their population grow by over 40 percent since 2014. Block groups in the southwest are seeing population growth between four percent and 40 percent. Figure 1 provides the population of each block group in Petersburg. Shading denotes the percentage range by which it changed between 2013 and 2017 (American Factfinder, 2017c).

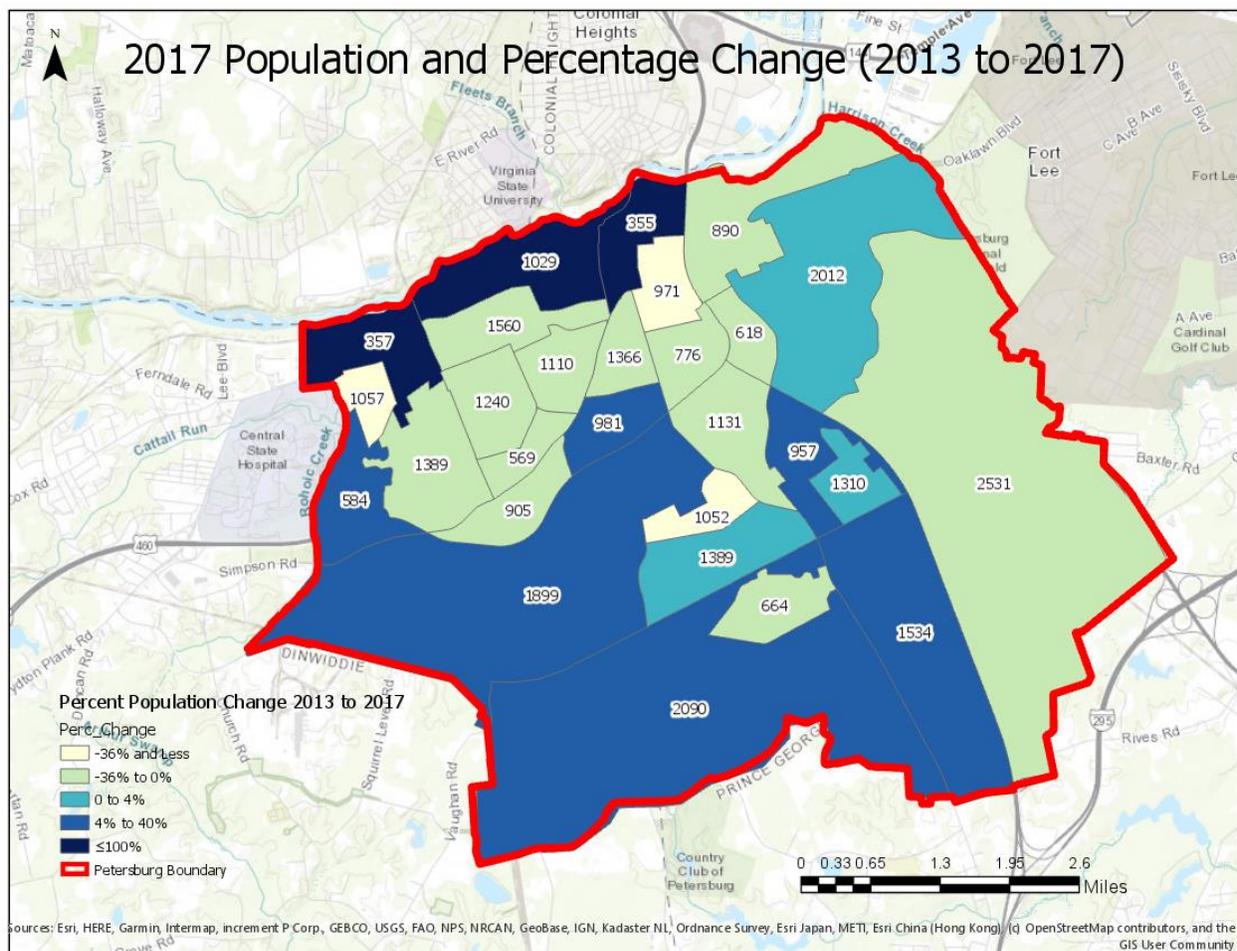


Figure 1 - American Factfinder. Population and Percent Change for Petersburg Va. by Block Group, US Census Bureau. 2013 through 2017.

Race

African Americans comprise 76 percent of Petersburg's population. White is the next largest race with 17 percent, followed by Multi-race/Other at six percent. As Figure 2 indicates the African American population is concentrated primarily in the northeast and north-central parts of the city, where as Whites are concentrated in the north along the river and in the south. Figure 2 provides the percentage of African Americans of each block group in Petersburg for 2017 (American Factfinder, 2017d).

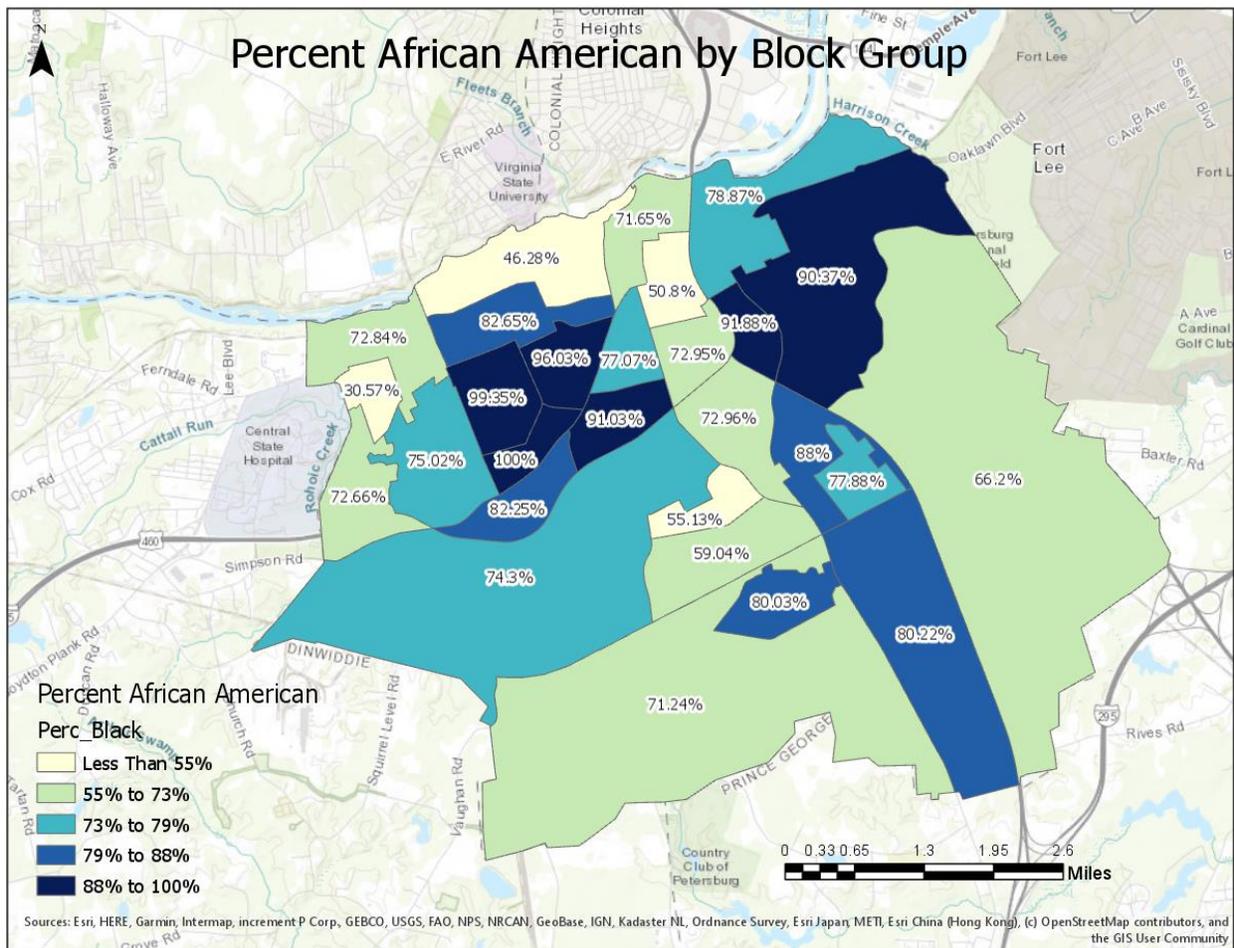


Figure 2 - American Factfinder. Percentage of African American for Petersburg, Va. By Block Group, US Census Bureau. 2017

Median Household Income

Petersburg has a median household income of \$33,939 (2017), a decrease of \$485 since 2013. Block groups in the northwest and southwest have median household incomes of over \$50,000 and are the highest in Petersburg. A number of the north central and northeast

block groups have median household incomes of less than \$20,000 and are the lowest in Petersburg. The largest gains in median household income (since 2013) are in the northwest block groups of Petersburg which have seen a 4-year gain of over 20 percent. Those block groups to the immediate south and east of this area have experienced the greatest loss of median household income, losing over 20 percent since 2013. For comparative purposes, the 2017 median household income for the United States is \$61,372 and for the State of Virginia is \$71,293. Figure 3 provides the median household income of each block group in Petersburg and the percentage by which it has changed between 2013 and 2017(American Factfinder, 2017b).

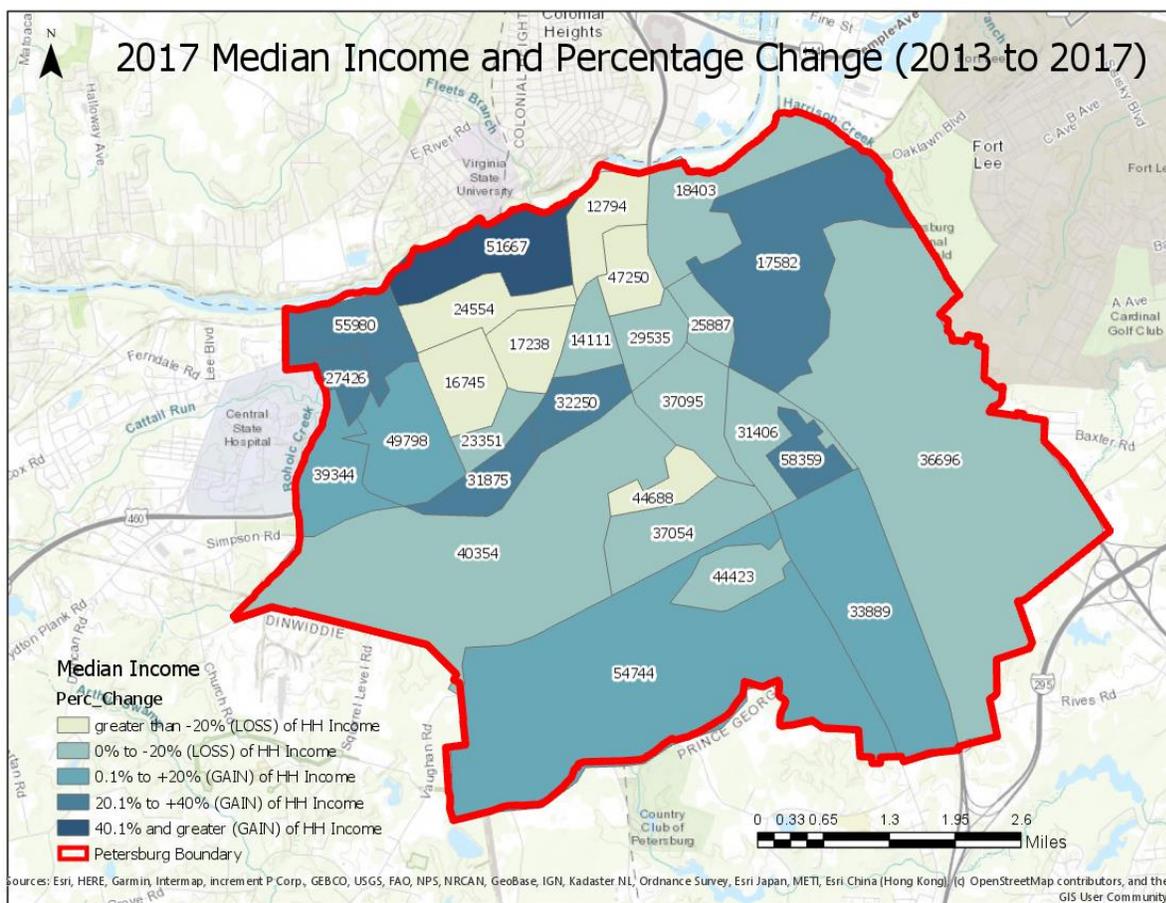


Figure 3 - American Factfinder. Median Income & Percent Change for Petersburg, Va. By Block Group, US Census Bureau. 2013 through 2017

Median Age

Petersburg has a median age of 38.3 years (2017). This has decreased by 1.5 years since 2013, when the median age was 39.8. The majority of the block groups in the central and eastern sections of the city are aging while those surrounding these areas are growing younger.

Figure 4 provides the median age of each block group in Petersburg and the number of years by which it changed between 2013 and 2017 (American Factfinder, 2017a).

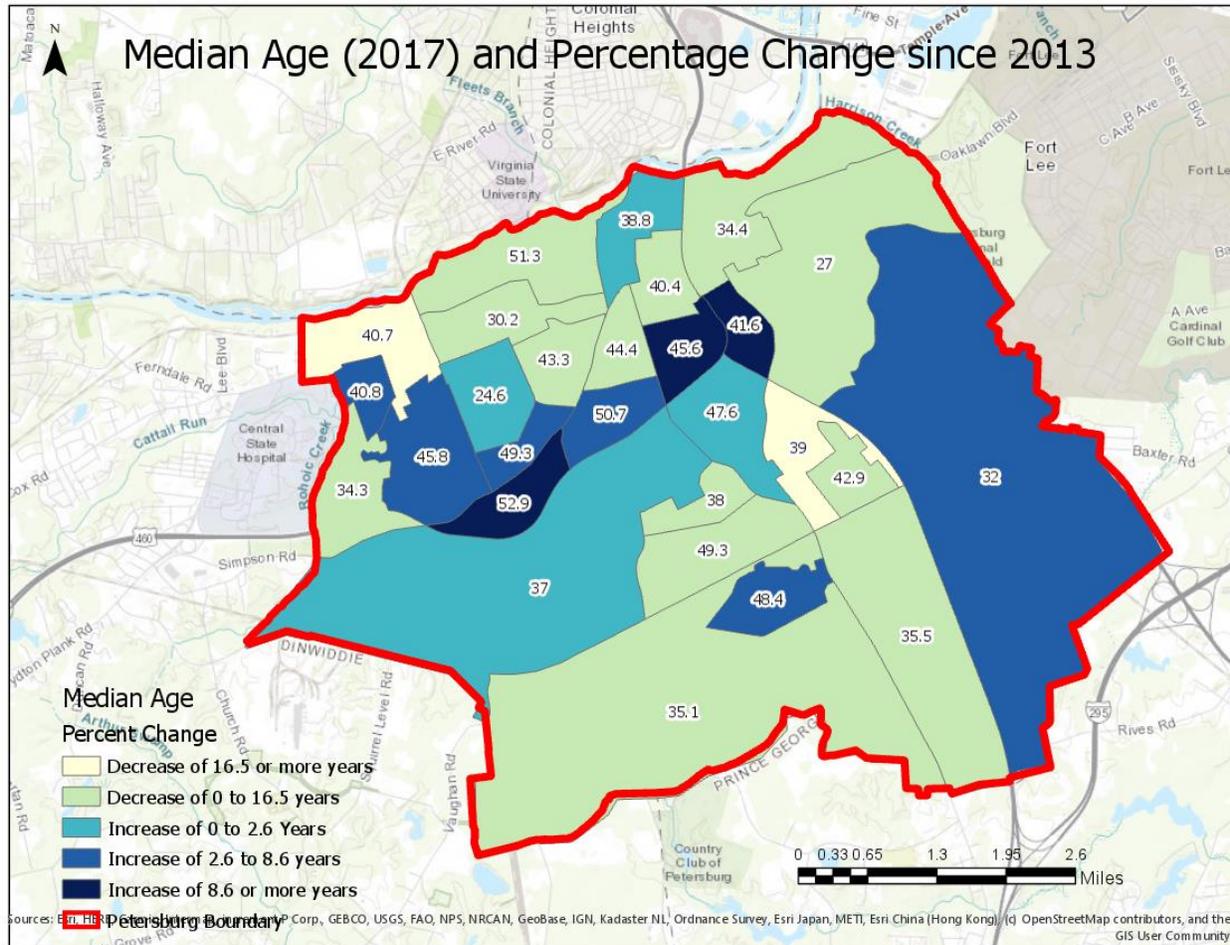


Figure 4 - American Factfinder. Median Age & Percent Change for Petersburg, Va. By Block Group, US Census Bureau. 2013 through 2017

Unemployment

Petersburg has an overall unemployment rate of 12.2 percent (as of 2017). This rate varies significantly across Petersburg census tracts. The northeast and central areas of Petersburg have the highest unemployment rates (greater than 23 percent) and the southern areas have the lowest rates (less than seven percent). The 2017 unemployment rate for the United States is 6.6 percent and for the State of Virginia is 5.5 percent. Figure 5 provides the unemployment rate by census tract for Petersburg in 2017 (American Factfinder, 2017).

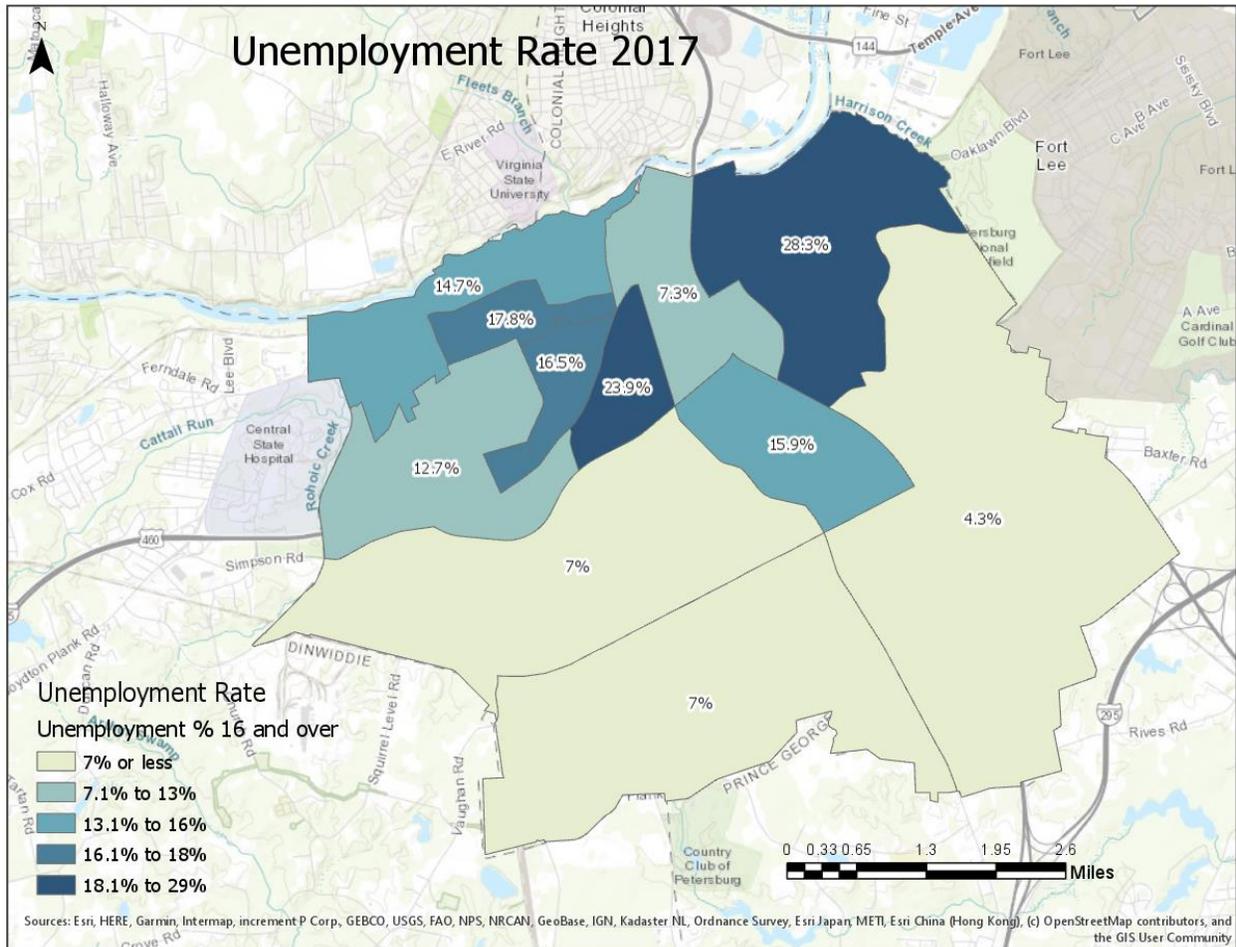


Figure 5 - American Factfinder. Unemployment Rate for Petersburg, Va. By Census Tract, US Census Bureau. 2017

Percent of Households with No Vehicle Access

Twenty percent of households in Petersburg do not have access to a vehicle. This rate varies significantly across Petersburg block groups. The northeast and north central areas of Petersburg have some of the highest percentages of households without vehicle access, with rates above 50 percent. The northwest and southern areas of Petersburg have some of the lowest percentages of households without vehicle access, with rates below six percent. For comparative purposes, only 8.8 percent of households in the United States do not have access to a vehicle, and for the State of Virginia the rate is 6.3 percent. Figure 6 provides the percentage of households without vehicle access for Petersburg in 2017 (American Factfinder, 2017e).

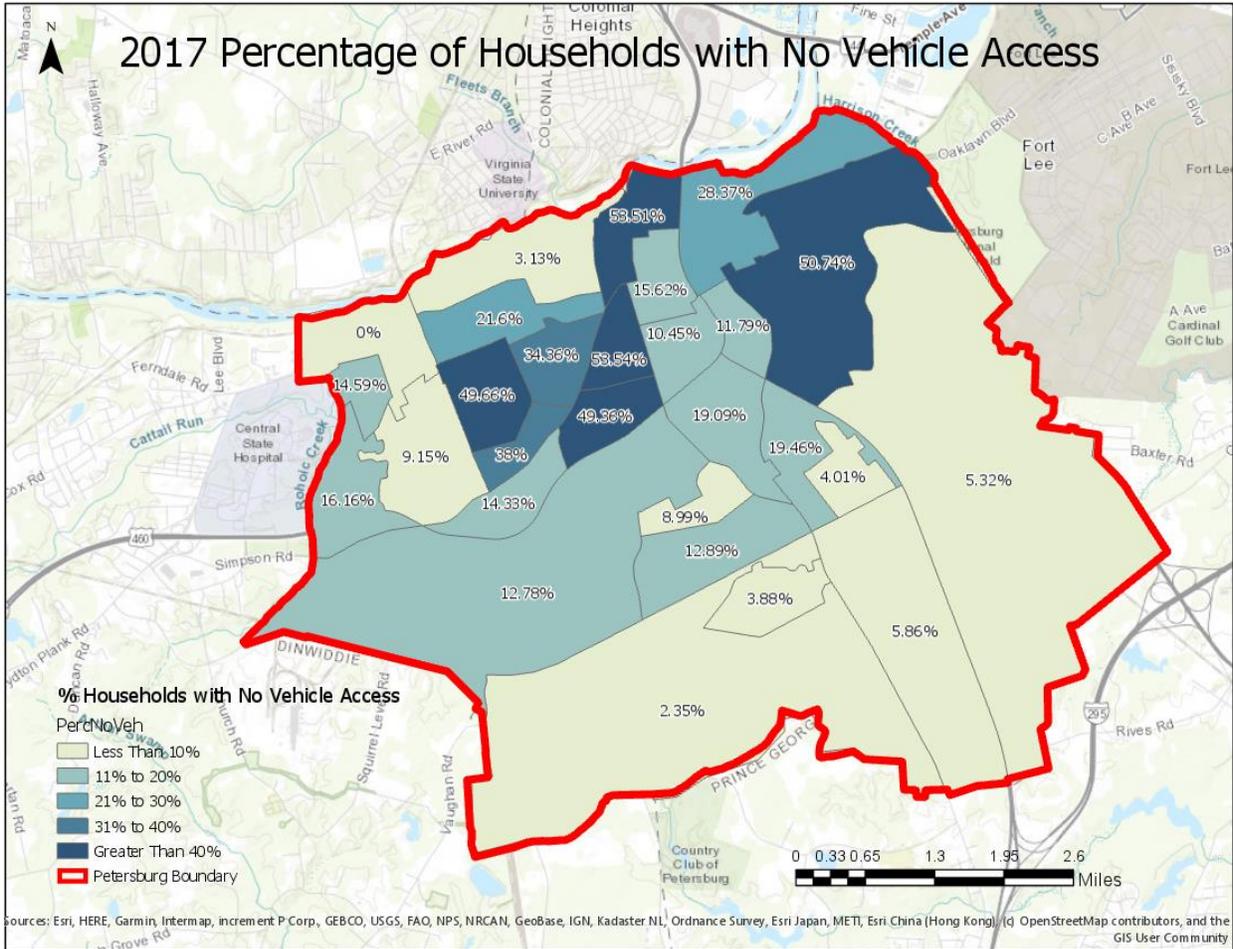


Figure 6 - American Factfinder. Percentage of Households with NO Vehicle Access for Petersburg, Va. By Block Group, US Census Bureau. 2017

Trade Area Characteristics

Petersburg Grocery-Starved Trade Areas

A trade area is a geographic area within which a retail business enterprise draws most of its business. Groceries are so-called “convenience goods” that are purchased relatively frequently; people find it more convenient to buy them from businesses located close to their home, making their trade areas relatively small (University of Wisconsin-Madison Authors, 2019). We have identified three trade areas in Petersburg, based on population density, lack of competing grocery stores, and major physical features (e.g. major roadways). Figure 3 provides the mapping of the Downtown, Northeast and Eastside trade areas.

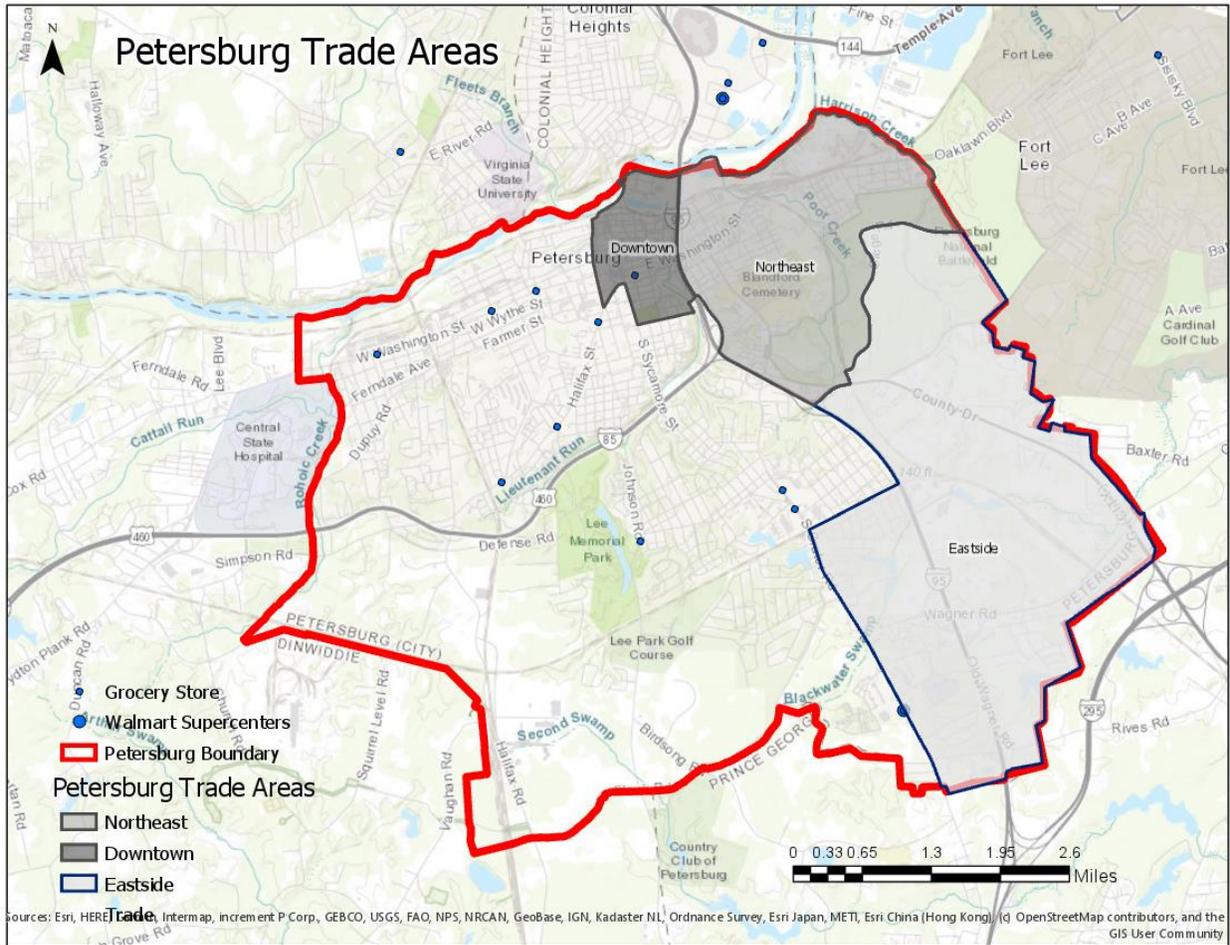


Figure 3 - City of Petersburg, Va. Grocery Trade Areas, 2019

Downtown Trade Area

The Downtown is defined as the area west of Interstate 95, east of Market Street and extending north to the city boundary from East Filmore Street. It contains census block groups 811300-1 (northern part) and 811300-2 (south). This area is the urban center of Petersburg and contains retail, residential, and commercial property.

An IGA Supermarket is located within the trade area, but it is reportedly not frequented by many residents. Other food retailers in the area include three convenience stores, a food pantry, and a seasonal/weekly farmers market. Figure 4 provides a listing of all food retailers in this trade area.

This trade area has a population of 1,326 people. Its median household income is a mix, with the north section (block group 811300-1) well below the poverty level at \$12,794 and southern section (block group 811300-2) at \$47,250. Vehicle accessibility is similarly split with 50 percent of the northern section lacking access to a vehicle, while only 15 percent of the southern section lack that access.

Downtown Trade Area Food Retailers					
Market Place	110 W Washington St	Petersburg	VA	23803	Convenience Store
Qwick Stop	8 E Wythe St	Petersburg	VA	23803	Convenience Store
Liberty Mart	140 E Washington St	Petersburg	VA	23803	Convenience Store
River Street Market	30 River Street	Petersburg	VA	23803	Farmers Market - Every Saturday (April 13th - October 26th)
Cares Inc.	120 E Washington St	Petersburg	VA	23803	Food Pantry
IGA Supermarket	15 S Adams St	Petersburg	VA	23803	Grocery Store

Figure 4 - Downtown Trade Area Food Retailers, 2019

Northeast Trade Area

The Northeast Trade Area is located in the northeast corner of Petersburg, east of Interstate 95 and north and west of Siege Road. It contains census block groups 810100-1 (north section), 810100-2 (southeast section) and 811300-4 (southwest section). This area can be classified as mixed use, with retail, residential, commercial and industrial areas.

There are no grocery stores located within the Northeast Trade Area, however, there are five convenience stores, an international mini-market and a variety/dollar store. Figure 5 provides a listing of all food retailers in this trade area.

This trade area has a population of 3,250 people. Its median household income ranges from \$17,582 in the southeast portion of the trade area to \$25,887 in the southwest portion of the trade area. Vehicle accessibility varies from over 50 percent of the southeast section having no access to a vehicle, to 12 percent of the southwest section lacking that access.

Northeast Trade Area Food Retailers					
Kwik Mart	2328 E Washington St	Petersburg	VA	23803	Convenience Store
Quik Stop	715 E Washington St	Petersburg	VA	23803	Convenience Store
Petersburg Food Mart	1500 E Washington St	Petersburg	VA	23803	Convenience Store
Marathon	615 E Washington St	Petersburg	VA	23803	Convenience Store
7-Eleven	701 S Crater Rd	Petersburg	VA	23803	Convenience Store
Goodness & Mercy International Food Market	1933 E Washington St	Petersburg	VA	23803	International Mini Market
Dollar General	2131 E. Washington St	Petersburg	VA	23803	Variety Store

Figure 5 - Northeast Trade Area Food Retailers, 2019

Eastern Trade Area

The Eastern Trade Area is located west of Interstate 95 and south of Siege Road. It contains census block group 811200-1. This area has a low density of households and has a mix of land uses.

There is no grocery store located in this trade area, however, there are seven convenience stores, a health food store, an international mini mart, and a variety/dollar store. Figure 5 provides a listing of all food retailers in this trade area.

This trade area has a population of 2,532 people. Its median household income is \$36,696. Only 5 percent of the households in this area do not have access to a vehicle.

Eastside Trade Area Food Retailers					
Miller Mart	1200 Courthouse Rd	Petersburg	VA	23803	Convenience Store
Sheetz	151 Wagner Rd	Petersburg	VA	23805	Convenience Store
Star Express County Drive LLC	2127 County Dr	Petersburg	VA	23803	Convenience Store
Mobil	2156 County Dr	Petersburg	VA	23803	Convenience Store
Gulf	2743 S Crater Rd	Petersburg	VA	23805	Convenience Store
Wawa	3199 S Crater Rd	Petersburg	VA	23805	Convenience Store
Shell	328 Rives Rd	Petersburg	VA	23805	Convenience Store
The Storehouse	2791 S Crater Rd	Petersburg	VA	23805	Health Food Store
Adriana's Mini Market	2645 County Dr # S	Petersburg	VA	23803	International Mini Market
Dollar General	3105 S Crater Rd	Petersburg	VA	23803	Variety Store

Figure 6 - Eastern Trade Area Food Retailers, 2019

Survey of Resident Food Preferences

To understand potential demand for food access alternatives, it was important to get feedback from Petersburg residents and shoppers in the form of quantitative and qualitative data. The team created a survey to collect this type of data, and it is located in Appendix B. We designed the survey to capture data in three focus areas:

1. Food shopping habits
 - a. Frequency and duration of shopping
 - b. Transportation and size of household being shopped
 - c. Priorities in determining where to shop (affordability, proximity, selection, etc.)
2. Food preferences
 - a. Types of food not available in their neighborhood
 - b. Current shopping locations
 - c. Food access preferences within their neighborhood (mobile market, food co-op, etc.)
3. Demographics
 - a. Level of food insecurity
 - b. Ward where they reside, work location, race and age etc.

Two open-ended questions were included in the survey:

1. Where do you currently shop? (name of store and street name)
2. What would make you shop more in your neighborhood?

Survey Methodology, Marketing, and Dissemination

We developed the survey for both physical and electronic distribution and designed both with anonymity to encourage honest responses and protect the privacy of the respondents. We created the electronic version of the survey using a google form with a corresponding link and QR code for easy accessibility online. We worked closely with Reginald Tabor to market and disseminate the survey, and we connected with the following organizations and groups:

1. City of Petersburg (Facebook, Instagram, Virginia Issues)
2. Loft Apartments
3. Pathways (Nonprofit Community Development Corporation)
4. Petersburg Redevelopment & Housing Authority
5. Petersburg Chamber of Commerce
6. Petersburg Public Library
7. Petersburg Region (Facebook, Instagram)
8. Progress Index News Website

We collected all data through the Google form. The City of Petersburg distributed the survey through its channels, and the staff of Pathways, a local nonprofit, worked with their clients to complete the survey; the partnership with Pathways helped eliminate barriers of Internet and computer access for patrons of its free clinic, its YouthBuild program, and its Financial Opportunity Center. We collected survey responses from September 23 through October 31, 2019, and the flyer we distributed to solicit participation is included in Appendix D.

Survey Results

We received 92 survey responses with data on the experiences and desires of Petersburg residents for their food access. Because the electronic survey was the primary tool for data collection, it was not easily accessible for people without Internet access, or for those not actively following and checking emails from our partners who disseminated the survey. While considering this limitation, we share a snapshot of the overall data in the tables below, and we highlight subsets of data for groups with special considerations, such as people with children, and people of color.

Table 1: Survey Overview - Subset Definitions and Rationale

All Responses	People with Children	Financial Need	People of Color
Total Responses: 92 % of total: 100%	Total Responses: 15 % of total: 16%	Total Responses: 38 % of total: 41%	Total Responses: 49 % of total: 53%
<u>Criteria:</u> All survey respondents	<u>Criteria:</u> People who answered 1 or higher when asked, "How many CHILDREN do you buy groceries for?" <u>Designation Rationale:</u> Some of the food access strategies implemented across the country have families in mind, and there may be distinctions in what families with children need.	<u>Criteria:</u> Everyone who selected Often or Sometimes True for the following questions: "The food I buy just doesn't last, and I usually don't have money to get more." "I can't afford to eat balanced meals." <u>Designation Rationale:</u> Low-wealth families tend to be at higher risk for food insecurity, so there may be distinctions in what their needs are.	<u>Criteria:</u> Everyone who did not select white when asked, "What is your racial/ethnic background?" <u>Designation Rationale:</u> Petersburg is 76 percent Black and 82 percent non-white. The total survey respondents were 48 percent white, which does not match the demographics of the community. This designation helps determine where people of color have different needs since they represent the majority of Petersburg residents.

Food Shopping Habits

Over 70 percent of all respondents purchase groceries at least once per week, and 88 percent spend less than 20 minutes in the store per trip. Almost all respondents go to their grocery store using a car, and they chose "high quality fresh produce," "affordable prices," and "customer service" as important determinants when deciding where to shop, regardless of family size, financial need, or race.

There were two main areas of distinction among the subsets shown above. The first was the "top five" reasons when choosing where to shop. The category "close to my house" was on the top five list for the total of the respondents, people with children, and people with financial need; however, people of color substituted "close to my house" with "good selection." The second area of distinction was shopping frequency. The percentage of people who shop once a week or more is 71 percent for all respondents, but for people with financial need and people with children, shopping frequency decreases to 58 percent and 53 percent respectively. The



lowest shopping frequency--once a week or more--is for people of color at 41 percent, which is nearly 30 percentage points lower than the overall pattern. While there is a small increase in the percentage of people of color who spend less than 20 minutes at the store per visit, this is only six percentage points higher than the overall results. On the contrary, people with children and people with financial need spending less than 20 minutes at the store per visit is slightly lower than the overall results. These distinctions surface a few important observations:

1. People of color, people with children, and people with financial need shop less frequently than survey respondents overall; and
2. A higher percentage of people of color spend less than 20 minutes in the store at a time than any other group. When combined with shopping frequency, people of color spend less time in the grocery store and go shopping less often than respondents as a whole.

These patterns could be because of culture, lifestyle habits, effort required to get to the store, higher rates of eating prepared foods, or a myriad of other reasons. More research is needed to understand this difference in behavior.

Table 2: Food Shopping Habits (Frequency, Duration, Transportation, etc.)

	All Responses %	People with Children %	Financial Need/Food Insecurity %	People of Color %
Buys groceries once a week or more	71.3	53.3	57.9	40.7
Spends less than 20 minutes at the store per visit	88.1	86.7	86.8	93.9
Drives a car to the store	95.7	86.7	86.8	91.8
Top 5 important reasons when choosing where to shop <i>*Categories with the highest percentage of people selecting "Very Important" or "Somewhat Important"</i>	High quality fresh produce (100%) Atmosphere (cleanliness, safety etc.) (99%) Affordable prices (97%) Customer Service (97%) Close to my house (95%)	Affordable prices (100%) Close to my house (100%) Customer Service (100%) Good selection (100%) High quality, fresh produce (100%)	Affordable prices (100%) Close to my house (100%) Customer Service (100%) Good selection (100%) High quality, fresh produce (100%)	Customer Service (100%) Good selection (100%) High quality, fresh produce (100%) Affordable prices (98%) Atmosphere (cleanliness, safety etc.) (98%)

Food Preferences

When asked “What types of food do you want to buy that are not currently available in your neighborhood,” nearly half of the respondents chose fresh fruits and vegetables. Fresh meats also consistently appeared in the top five responses; however, 47 percent of people with children identified fresh meats which is eight to ten percentage points higher than the other subsets. People of color and people with children also identified frozen vegetables in their top five list, and people with children included canned vegetables. People with children, people with financial need, and people of color identified grains and dairy as food they wanted access to in their neighborhood; however, nearly half of the people with children identified dairy which is nearly twice the percentage as the other subsets.

The top three ways people *want* to access food within their neighborhood vary from as low as 27 percent to as high as 80 percent, but the top three responses across all subsets of respondents and the overall results are full service grocery stores, supercenters (Walmart, Sam’s Club), and farmers markets. Of people with children, 40 percent want access to sweet snacks; this is a data outlier as this is the only group making this request. Overall, at least 40 percent of people with children want access to all food groups listed within the survey, which is a higher percentage than any of the other groups. The table below goes into more detail, and the graph shows a snapshot of the food preference responses across all data sets.

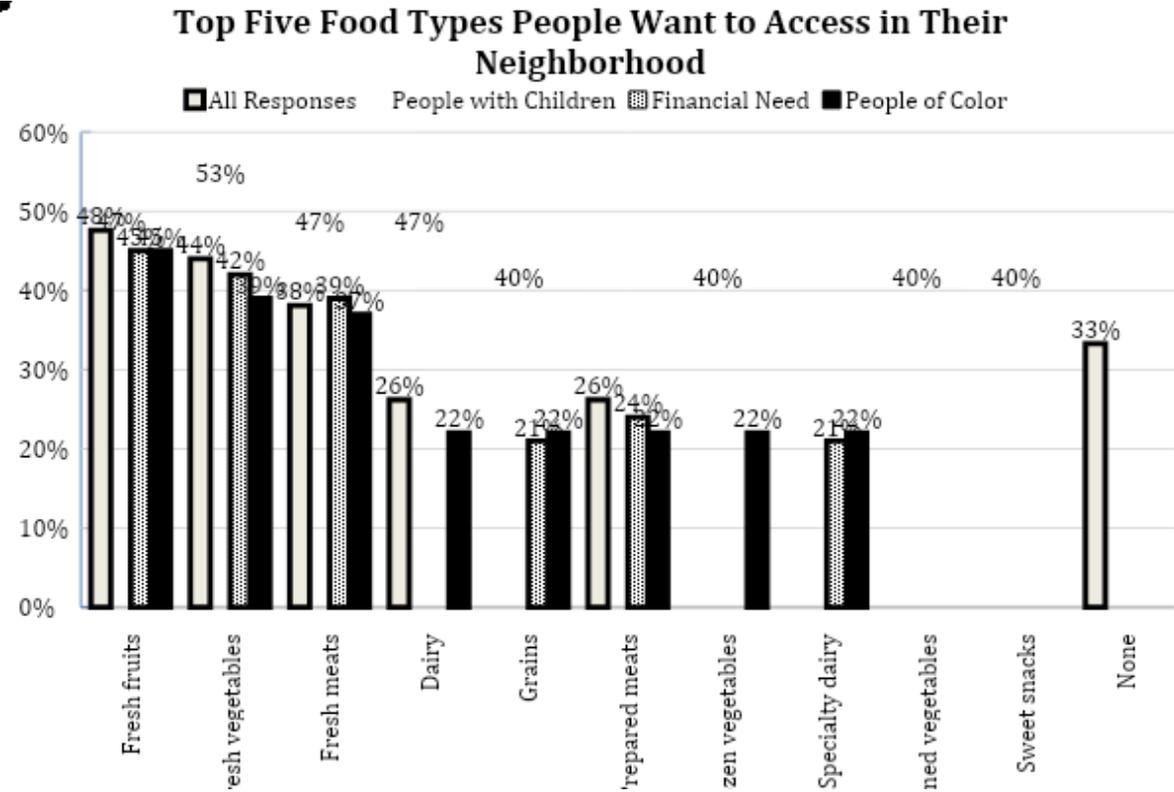


Table 3: Food Preferences, Current Grocers and Desired Access

	All Responses %	People with Children %	Financial Need/Food Insecurity %	People of Color %
<p>Top 5 types of food you want to buy that are not available in your neighborhood</p> <p><i>*Most respondents gave multiple answers.</i></p>	<p>Fresh fruits (47.6) Fresh vegetables (44) Fresh meats (38.1) None (33.3) 2 way tie: prepared Meats (ex - rotisserie chicken) and Dairy (eggs, butter, milk, cheese etc.) (26.2)</p>	<p>Vegetables (fresh) (53) Dairy (eggs, milk, butter etc.) (47) Fruits (fresh) (47) Meats (fresh) (47) 4-way tie: Grains, sweet snacks, canned vegetables, frozen vegetables (40 each)</p>	<p>Fruits (fresh) (45) Vegetables (fresh) (42) Meats (fresh) (39) Meats (prepared - ex: rotisserie) (24) 2-way tie: grains and specialty dairy (ice cream, yogurt etc.) (21 each)</p>	<p>Fruits (fresh) (45) Vegetables (fresh) (39) Meats (fresh) (37) 5-way tie: Dairy, grains, meats (prepared), specialty dairy, vegetables (frozen) (22 each)</p>
<p>Top 3 current grocery stores</p> <p><i>*Some respondents gave multiple answers.</i></p>	<p>Food Lion (36) Walmart (30) Publix (16)</p>	<p>Walmart (47) Food Lion (40) 3-way tie: Aldi, Kroger or Publix (13 each)</p>	<p>Walmart (45) Food Lion (24) Publix (18)</p>	<p>Food Lion (37) Walmart (37) Publix (10)</p>
<p>Top 3 ways you would like to access food within your neighborhood</p> <p><i>*Some respondents gave multiple answers.</i></p>	<p>Full service, traditional grocery store (ex: Food Lion) (76) Farmers' market / Farm stand (52) Supercenter or Club Store (e.g., Walmart, Sam's Club) (39)</p>	<p>Full service, traditional grocery store (ex: Food Lion) (80) Supercenter or Club Store (e.g., Walmart, Sam's Club) (27) Farmers' market / Farm stand (27)</p>	<p>Full service, traditional grocery store (ex: Food Lion) (71) Supercenter or Club Store (e.g., Walmart, Sam's Club) (47) Farmers' market / Farm stand (45)</p>	<p>Full service, traditional grocery store (ex: Food Lion) (69) Farmers' market / Farm stand (49) Supercenter or Club Store (e.g., Walmart, Sam's Club) (47)</p>

Demographics

Out of the 92 survey respondents, 41 percent experience food insecurity. For people with children and people of color, that percentage is higher by 12 -16 percentage points. Only 15 percent of all respondents have children, but the percentage of people with financial need who also have children is 21 percent. With such a small sample size, these are not large differences. All survey respondents with children and people of color are residents of the city of Petersburg, and 91 percent to 92 percent of overall respondents and people with a financial need are Petersburg residents. Responses show that 57 percent of people of color are dealing



with food insecurity; however, the responses also showed that people of color are working in Petersburg at a rate 12 percentage points higher than the overall survey population. It is not known whether we can link these two factors--do they show that people of color who both live and work in Petersburg have limited options near their homes and places of employment which contributes to their higher levels of food insecurity?

In terms of age, 40 percent of all respondents are under 45 years old, and while less than 50 percent of people with financial need and people of color are also under 45 years old, the percentage of people with children is slightly higher at 53 percent.

Table 4: Food Insecurity, Residency, Employment and Demographics

	All Responses %	People with Children %	Financial Need/Food Insecurity %	People of Color %
Some level of food insecurity	41.3	53.3	100.0	57.1
With children	15.2	100.0	21.1	18.4
Live in the City of Petersburg	91.3	100.0	92.1	100.0
Employed	82.6	80.0	78.9	81.6
Employed in Petersburg	55.4	60.0	52.6	67.3
Under age 45	40.2	53.3	47.4	45
Racial Distribution	48% White 44% Black 5% Other races 3% Prefer not to answer	44% Black 40% White 12% Latino/a/x	55% Black 24% White 11% Latinx 5% American Indian 5% Prefer not answer	100% Black

Analysis of Findings

The survey data collected represents a very small fraction of the overall Petersburg population, but by extrapolating the survey results with known data, we discover key points to help inform the recommendations. The overall population of Petersburg is 32,037, and 76 percent of the population is Black/African American, or approximately 24,348 people of color. Extrapolation of the survey responses suggest 57.1 percent, or 13,902, of Petersburg's Black

residents are dealing with food insecurity—who cannot always afford to eat balanced meals or who cannot purchase enough food to last between grocery trips. However, this likely overstates the problem. Likewise, the median age of Petersburg residents decreased from 2013 to 2017, which points to trends of a younger population and/or a growing number of children; the median household income also decreased. These trends point to the survey data subsets of people with children and people with financial need/financial insecurity. In 2017, 21.8 percent of the Petersburg population and 34.5 percent of all children in Petersburg were living in poverty. This equates to 6,984 people in Petersburg, or one out of every five residents, who would potentially qualify for government assistance to subsidize the cost of their food. Both people with children and people with financial need chose the same top five priorities when determining where to shop: affordable prices, close to my house, customer service, a good selection, and high quality, fresh produce.

There were more similarities than differences across respondents, regardless of financial need, race, age or familial status. Commonalities include that the majority of respondents want to access food through a full-service grocery store, farmers market/farm stand or a supercenter (e.g., Walmart, Sam's Club). All respondents and subset groups overwhelmingly chose fresh vegetables, fresh fruits, and fresh meats as foods they want to access within their neighborhoods. Over 85 percent of all respondents spend 20 minutes or less in the store, and 71 percent of all respondents go to the grocery store at least once per week. Combined, this data affirms a need for increased access to fresh vegetables, fruits, meats, and other foods within Petersburg neighborhoods in order to meet the needs of all Petersburg residents, especially those who are dealing with food insecurity. Residents prefer more traditional means of accessing food (grocery stores, farmers markets, etc.); however, there is room for innovation that will meet residents' food and access priorities. More data needs to be collected to get a representative sample of Petersburg, but this survey helps to inform the ongoing efforts to address food access that is aligned with resident desires.

Supply-Side Analysis

Existing Grocery Stores

Petersburg Food Retailers

Petersburg has 57 food retailers within its city boundary and another seven within close proximity to the city, either to the northeast in Hopewell or to the east in Fort Lee. These retailers range in size and product offering, from Walmart Supercenters and traditional grocery stores to convenience and dollar stores. Convenience stores make up the majority of the food retailers accounting for 38 of the 57 stores (67 percent). There are eleven grocery stores that range in size from small, privately owned community grocery stores to full sized grocery stores from grocery chains (Food Lion). There are nine variety/dollar stores that are all from chains (Dollar General and Family Dollar). There is one Walmart Supercenter in southeastern Petersburg and another one just north of the city in Hopewell. Figure 1 shows the location of food retailers in Petersburg and within close proximity by category. In the appendix is a detailed listing of all food retailers.

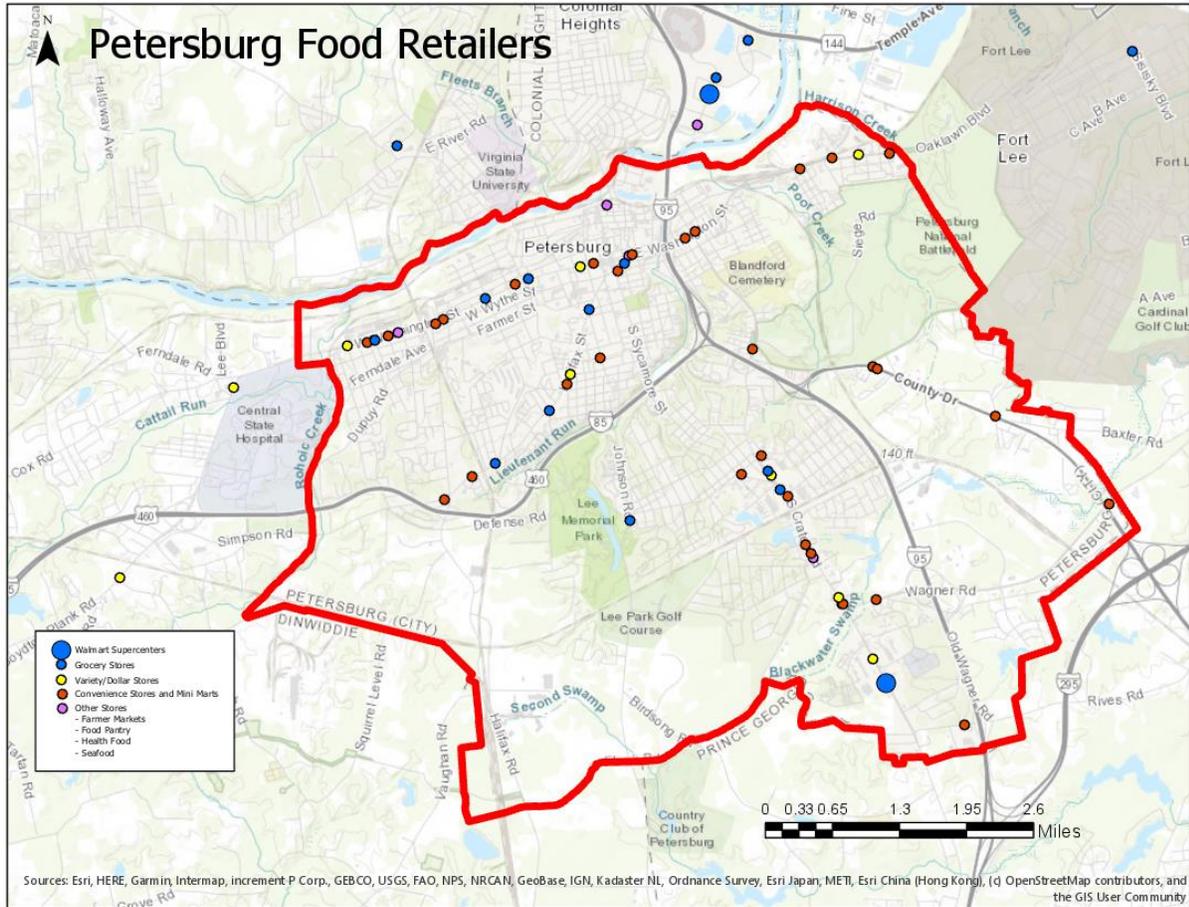


Figure 1 - City of Petersburg, Va. Food Retailers, 2019

The food retailers are primarily located along three main Petersburg travel/business corridors. Washington Avenue/Wythe Street (US 460 & State Route 36) runs east-west along the northern section of the city and has twenty of the food retailers located on or within close proximity to it (making up 35 percent of the food retailer locations). Crater Road (US 301) runs north-south through the center of Petersburg and has 13 of the food retailers located on it, mostly in the southern section of the city. Last, Halifax Street runs from the west-central section of the city and travels north-easterly into Petersburg’s city center and has nine food retailers.

Petersburg Grocery Stores

Full-service grocery stores are critical to a community. They generally offer healthier food options to customers at lower prices than other retail venues and they spur economic development as they often serve as anchors around which other businesses are willing to locate

Food Retailer Research

In addition to this report, the Fall 2019 Urban Commercial Revitalization class completed a separate report on alternative food supply options for food deserts. In total, 13 options were explored:

1. Big Box Supermarkets
2. Convenience Stores with Gasoline
3. Convenience Stores without Gasoline
4. Discount Variety Stores
5. Farmers Markets
6. Food Banks
7. Food Co-operatives
8. Franchise/Alliance Grocery Stores
9. General/Country Stores
10. Large Supermarkets/Small Format Franchise Stores
11. Mobile Grocery Stores
12. Small Format Discount Grocery Stores
13. Small Independent Grocery Stores

Research of these potential options included categories including, but not limited to:

- **Organization** - type of store, business model, legal form, management/governance structure, funding strategy, number of workers, and customer demographics;
- **Operations** - type of product selection/offering, regional partners, wholesalers/institutional supporters, social services, and advertising;
- **Locations and Physical Attributes** - typical locations, co-location tendencies, number of residents and workers located within the market area, and community contributions;
- **Cases** - which stores have succeeded, which stores have not succeeded, and why;
- **New & Testing Formats & Services** - examples of new initiatives and expansion efforts.

Of the 13 options, our team identified four that seem best suited to address the food access issues present in the three trade areas we studied. Further information about these four, as well as other supply options, is available in *Increasing Access to Food: A Comprehensive Report on Food Supply Options*.

Mobile Grocery Stores

Mobile grocery stores are a retail intervention strategy to address the issue of geographic distance and lack of public or private transportation by bringing grocery items directly to residents, usually on a regular schedule and with specific stops within neighborhoods. They take numerous forms, and offer a variety of goods and services, ranging from only fresh fruits and vegetables to a full selection of standard grocery items, including dairy, eggs, poultry, meat, seafood, bakery items, dry goods, and health and beauty aids. Possible legal forms

include sole proprietorship, limited liability corporation (LLC), nonprofit organization, cooperative-worker ownership, or hybrid for-profit/nonprofit (Briejer & Carbary, 2016). The mobile grocery operations we examined for this study are structured as hybrid models, with a mix of private commercial, government, higher education, foundation, and nonprofit partners. While a market-dependent business can be viable, most of the successful mobile markets around the United States are successful because they have multiple revenue streams, such as from sales as well as nonprofit funding. If a sole proprietorship or LLC is the legal form, the management structure will be governed by incorporation or other documents. However, most mobile groceries are operated and funded by more than one entity, and one or more of those entities will take the lead.

Private financing sources include private banks, community development financial institutions (CDFIs) offering lower interest rates for projects with social benefits, private equity funds, and charitable foundations (PolicyLink, and Local Initiatives Support Corporation, 2008). Public financing sources include the USDA Local Food Promotion Program (LFPP), which offers planning and implementation grants with a 25 percent match to support the development and expansion of local and regional food business enterprises (U. S. Department of Agriculture, Agricultural Marketing Service, 2019). Product sales alone are usually insufficient to cover operating costs. For example, the Arcadia Mobile Market in Washington, D.C., reported its gross sales in 2012 were \$43,478 while its general operating expenses totaled \$99,395. The number of workers varies considerably and depends upon the configuration and scale of the operation; as one example, the Kansas City Rollin' Grocer employs ten paid team members and has numerous volunteers (Sauer, 2016).

As with staffing, the size of a mobile grocery store's operation and the square footage of its vehicle vary considerably. Retrofitted vehicle types include city buses, school buses, step vans, library bookmobiles, beer delivery trucks, trailers, shipping containers, and 18-wheeler trucks (Worley, 2017; Robinson, et al., 2016; Bloeser, et al., 2019; Cherian, 2016; Hellman, 2017). The size of the operation of a mobile grocer will be reflected in the number of vehicles deployed, the number of routes, the number of stops along the routes, the distance between stops, the number of days in operation, etc. For example, in Kansas City, one truck can service 44,000 people at 15 stops without traveling long distances. In sparsely settled, rural communities, more time will be spent during an operational day traveling from one location to the next, which means fewer and shorter stops, with less time selling and tighter profit margins (Fox, 2018; Bloeser, et al., 2019). To help address economic disparities, some mobile markets sell produce at or below cost and/or participate in United States Department of Agriculture

(USDA) nutrition assistance programs for low-income households, such as the Supplemental Nutrition Assistance Program (SNAP), the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), the WIC Farmers' Market Nutrition Program (FMNP), and the Senior FMNP. Mobile groceries might, in addition to the sale of groceries, offer other goods and services, e.g., pharmacy, prepared foods for take-out or consumption on premises, café with or without seating, discount programs, food delivery, catering, automated tellers, mail/package pick-up/delivery, dry-cleaning pick-up/delivery, gasoline, etc. Also, several mobile grocers, recognizing that customers purchasing new types of foods may not know how to prepare them, partner their food sales with cooking demonstrations and recipes to help bridge this knowledge divide (EcoDistricts, 2016).

Mobile groceries operate in high-traffic areas and typically make stops at health clinics, schools, day care centers, farmers markets, parks, housing complexes, and other community sites (Urban Growers Collective, 2019). Mobile grocery stores are intended to reduce the distance between residents and grocery items. Therefore, they will typically locate stops where most residents can walk or ride a bike to them; however, this does not preclude the use of private or public transportation to reach a stop. Kroger, Food Lion, Whole Foods, and Pick 'n Save grocery operations have each partnered with local mobile grocery operations to expand access to food in communities served by their companies. According to the Columbia University School of International and Public Affairs (2014), many factors contribute to the success of a mobile market. These include public-private partnerships, philanthropy that promotes and supports policy innovation, support for innovation from local government, involvement of a city agency with the sustained interest and capacity to implement an innovative program, and technical assistance for program promotion, including a branding campaign.

Convenience Stores + Fruits & Vegetables

Convenience Stores without attached gas stations are privately owned businesses primarily engaged in retailing a limited line of goods that generally includes milk, bread, soda and snacks (North American Industry Classifications System, 2019). Convenience stores provide foods and goods that can range from snack and shelf-stable foods, to alcohol and tobacco products, to hot foods and in some cases fresh produce. They are most commonly recognized for providing low nutritional value foods in low-wealth communities that are often considered food deserts (Gebauer & Laska, 2011). In Virginia, the number of convenience stores has been decreasing since 2007. In addition, in 2017, 77 percent of all convenience stores in Virginia had six employees. According to the National Association of Convenience

Stores, 20.4 percent of all convenience stores do not sell gas, and 62.3 percent of all convenience stores are single-store operators (National Association of Convenience Stores, 2019).

The five ways to finance a conventional convenience store are: a conventional loan, Small Business Administration 504 and 7(a) programs, asset-based line-of-credit, unsecured business line-of-credit, and merchant cash advance. While these loan options on average carry interest rates of four percent to nine percent and typically range between 15 and 25 years, these loans are often considered risky investments. Like grocery stores, convenience stores operate with very small profit margins. On average, they earn two percent profit and use a “cash and carry” and “as needed” supply approach through local wholesalers. In some cases, they also work with independent distributors and produce trucks. Price mark-ups can range from 50 percent to 100 percent. As small establishments, they are most often family-run businesses that hire minimal additional support. Corner stores range in size from 800 square feet to 5,000 square feet. Most convenience stores without gas are less than 2,500 square feet.

Clearly, convenience stores have a limited impact on the overall economy, but under the right circumstances they may be able to play an important role in solving food access problems because they are already established in low-wealth communities. Studies in the Minneapolis/St. Paul area showed 83 percent of the operations were at least 25 years old, and 53 percent were operated by people of color. Nearly 60 percent of shoppers were male, and 26 percent have a Bachelor’s degree or higher. They also found that 63 percent of shoppers had a body mass index of 25 or higher and 37 percent were unemployed or not working (Lenk, Caspi, Harnack, & Laska, 2018). In this region, people of color make up 24.5 percent of the total population, but 53 percent of shoppers in this study. In addition, 48 percent of the population in Minneapolis have a Bachelor’s degree or higher while 74 percent of shoppers do not. While unconfirmed in Virginia, these patterns affirm research that places convenience store locations in low-wealth communities of color (Lenk, Caspi, Harnack, & Laska, 2018).

Convenience stores predominantly sell “energy-dense,” “low-nutritive” foods and drinks, tobacco products and convenience goods. This includes sugary beverages, candy, chips and other snacks, but can also include hot food, lottery tickets, beer etc. These stores rarely partner with other businesses. They exist across urban, suburban and rural locations across the country, and as noted above, they are most common in low-wealth communities of color. They are commonly found in areas considered food deserts and are most often the dominant choice for food purchase within those neighborhoods.

Some convenience stores also offer fresh produce and healthier food options, but this usually occurs through incentive-based programs involving grants, tax relief, training, technical assistance and/or inventory at a reduced cost (Borradaile, et al., 2009). These convenience stores accept these benefits and adjust their inventory to comply with eligible food offerings which include cereal, fruit and vegetable juice, eggs, milk, cheese, peanut butter, fruits and vegetables, whole grains, legumes, infant formula, and canned fish. Based on the stories of residents describing opening credit tabs or bartering goods and services with store owners in exchange for store items, it is clear that convenience stores participate in the low-wealth economy where informal trade and store credit support the financial sustainability of families.

The Healthy Corner Stores Initiative is a movement to equip convenience stores with healthy food options. This initiative has program models across the country, and The Food Trust based in Philadelphia has a track record of leading this work since 1992. Their program takes a holistic approach in order to increase the likelihood of sustainability. From support for the owners to education of shoppers, their comprehensive strategies have yielded positive results. They have even developed a National Health Corner Store Network for professional development and shared learning (The Food Trust, 2019). Local HCSI programs have been funded in part by the Virginia Department of Health. The focus has been to target areas classified as food deserts by the U.S. Department of Agriculture. Participants include eight corner stores in the City of Richmond in the Northside, East End and Southside. Qualitative data through owner and customer testimonials show a positive impact in the community. In Los Angeles, the Food Policy Council created the Healthy Neighborhood Market Network of 25 convenience store owners and provided the following: training, procurement solutions, infrastructure improvements, and marketing/re-branding.

Food Banks

Food banks are 501(c) nonprofit organizations centered on mass storage and distribution of healthy foods to be provided to individuals, local food pantries, schools, and other local organizations that distribute food to the community. Food banks are run by their boards of directors and by several paid employees. As nonprofits, food banks rely solely on external donations. These donations can come from individuals, foundations, bequests, or corporations. They have very few paid employees and use many community volunteers on the local level. Paid employees are in staff management roles such as “volunteer coordinator” or “senior leadership manager.” They can store up to millions of pounds of food each year (Food More,

2019). Their headquarters locations typically occupy large lots with no other businesses connected or occupying the plot of land. Chesterfield Food Bank (2019) services 1,800 people a week, and Feed More (2019) with its 300+ programs and network agencies serve 52,000 meals a day. The common target populations of food banks are working single mothers, low-income individuals, and people facing emergency food shortages, people receiving SNAP/EBT/WIC, senior citizens, veterans, the unemployed, victims of disaster, the homeless, and people living in food deserts (Feeding America, 2019)

Food banks distribute fresh produce, dairy, meat, fish, nonperishable food items, and much more. In order to partner with a food bank, a location must be a church, school, or 501(c) nonprofit that is devoted to alleviating community hunger through various programs that provide reduced cost or free food. Specifically, food can be obtained through a variety of different companies. Food banks solicit donations of non-perishable food items from local grocery stores, such as Kroger. Another way is to solicit donations from large-scale food manufacturing companies such as Performance Food Services. Other sponsors include local schools, organizations, and businesses that raise funds and foods by themselves and then donate them to the food bank. Partnering with the community, both food banks have several social service programs, such as Meals on Wheels and Jefferson Davis Hot Meal Program. The total list of these programs can be found in the “*Increasing Access to Fresh Food*” report. Food banks use a variety of different forms of advertisement to solicit funds and donations, bring awareness to issues surrounding hunger, interest potential volunteers, and notify the public that they have accessible resources. Television and radio commercials, billboards, online graphic ads, and local posters are all popular forms of advertisement. In addition, many nonprofits use direct mailers to engage their supporters and solicit additional funds from those who have previously donated to the organization (Tempel, 2016)

The Richmond-Petersburg Metropolitan Statistical Area population is 1.3 million, or 15 percent of Virginia’s population (Greater Richmond Partnership, 2018). The two food banks in this report are responsible for providing emergency food for potentially 15 percent of the state’s population. Feed More and Chesterfield Food Bank food banks are located along major corridors that can mainly be accessed by car. Specifically, they are both located within a 5-mile radius around various major grocery stores. These stores include Kroger, Walmart, Target, Aldi, Lidl, and Farm Fresh. Chesterfield Food Bank has served over 500,000 meals while Feed More serves over 52,000 meals a day state-wide.

Feeding America is a great example of a successful national food bank operation. Feeding America was founded in the late 1960’s and now has a network of over 200 food banks

across the United States (including Feed More in Richmond, Virginia). They feed one-seventh of all Americans each year, roughly 40 million people. Of these 40 million people, 12 million are children and seven million are seniors. The national organization has a four-star rating on Charity Navigator and claims that 98 percent of all received donations go directly into programs that serve people experiencing food emergencies. The major critique of food banks is that they do not address or alleviate long-term issues of hunger within communities and not foster the creation of long-term food access solutions. As indicated below, however, we believe they serve important roles on a temporary basis.

Franchise Grocery Stores (IGA)

This is a grocery store and/or supermarket utilizing a franchised resource in its operations, and its legal form is known as a franchise. Independent stores or smaller chains enter into a franchise agreement with a grocery franchisor. The established franchisor entity collects royalties from independent franchisees which in turn are able to access aspects of that entity's supply chain, business technologies, and marketing/advertising resources. The management structure varies based on type of independent operator.

Most IGA and Great Value stores are single location businesses, so the management structure is comparable to single location independent grocers. There are many cases where franchisees will expand or maintain a chain of stores; for example, Hometown Grocery, headquartered in Bluefield, VA, maintains a chain of 16 stores franchised under IGA using the brand of Grant's Supermarket. Growing from a single location in 1949, the family run operation opened its 16th location last month in Bluewell, WV where it moved into the shell of a former Kroger location – at that scale, characteristics of regional chain management structure set in. 'Eat This, Not That' magazine rated Grant's Supermarkets the most popular grocery store in West Virginia in 2019 (Boothe, 2019).

Most stores are between 20,000 to 60,000 square feet in size, but this number can fluctuate given that operators tend to move into former shells of other concepts. In Virginia, IGA records about 20-50 employees involved in a typical operation, which is somewhat below what a corporate supermarket would be ("ReferenceUSA - Detail," n.d.) Undoubtedly this has to do with the distribution and nature of IGA locations in the state. Here, the concept is exclusive to smaller rural markets.

"The franchise model...made it possible for small-town grocers to remain competitive in their given market without losing their homespun identity. While IGA, founded 1926, was a

somewhat early example of the franchise model, it differed in an important way: Instead of trying to set up the ramifications for how these local businesses should be run...—it instead offered different kinds of help to those retailers. That help, traditionally, has come in the form of marketing and access to a consistent supply chain” (Smith, 2016). Typical grocery products are offered, and many are positioned as discount or value grocery stores. Store product selection varies as on-site owners can make flexible decisions about product offerings and can often incorporate other supply sources outside of the franchisor’s supply chain. IGA uses a network of preferred partner wholesalers.

In Virginia, IGA’s tend to be rural or in low income areas in metropolitan areas. Most seem to anchor aging strip shopping centers or are in stand-alone buildings. Because most stores are adjacent to parking lots, many customers are expected to drive or transport themselves to these locations. IGA shoppers generally have very low incomes; they are Caucasian and of senior age. IGA shoppers tend to make small to mid-sized trips. (“IGA Demographics and Shopper Insights | Numerator,” n.d.)

There is already an IGA grocery store located on 15 South Adams Street in the proposed downtown trade area. Its location makes it convenient to the residents. Revamping the inside stock to include fresh fruits, vegetables, and healthy food options provides the surrounding community with options it does not currently have. There is also an opportunity for the store to partner with Instacart to provide grocery delivery. The local city government could potentially partner with the store to subsidize the costs for low-income residents with limited access to transportation.

Other Efforts Underway to Increase Food Access

There are several initiatives and programs underway in Petersburg working to expand healthy food access. This project seeks to support existing efforts and to positively contribute to work happening in the community. Through funding from the Virginia Foundation for Healthy Youth, local partners formed the Petersburg Healthy Community Action Team (HCAT). HCAT has been engaging students and families at Pleasant Lane Elementary School for cooking demonstrations, produce tastings and education, and their efforts have reached 560 students (Adams, 2019). These activities have been led and facilitated by a Youth Educator through the Virginia Family Nutrition Program and the Supplemental Nutrition Assistance Program (SNAP). HCAT also provided support for the River Street Market to participate in the Virginia Fresh

Match program which doubles the value of SNAP dollars as an incentive to purchase more fresh produce.

The Petersburg High Obesity Prevention Program (pHOPPs), funded by a five-year, \$2.5 million High Obesity Prevention (HOP) grant from the Centers for Disease Control and Prevention (CDC), aims to increase access for Petersburg residents to healthier foods and to connect routes to everyday destinations (with an emphasis on walking). Led and administered by the Petersburg unit of the Virginia Cooperative Extension (VCE) and the Virginia Tech Center for Public Health Practice and Research (CPHRP), the pHOPPs project is examining options to develop mobile produce markets throughout the city, partnering with corner stores to increase supply and demand for fresh fruits and vegetables, and supporting and advocating for more safe places to walk, bike, and actively commute throughout the city and get fit. The pHOPPs project is partnering with several organizations including Crater Health District (Petersburg office), Petersburg Public Library Healthy Living and Learning Center, Petersburg Wellness Consortium, River Street Farmers' Market, Friends of the Lower Appomattox River (FOLAR) and Petersburg Healthy Community Action Team (Petersburg High Obesity Prevention Program [pHOPPs], 2019).

The short- and long-term goals and projects of pHOPPs are to:

- Increase access to places that provide healthier foods and increase purchasing of healthier foods;
- Establish healthy nutrition standards in key institutions such as hospitals, afterschool and recreation programs, etc.;
- Work with food vendors, distributors and producers to enhance healthier food procurement and sales;
- Connect safe and accessible places for physical activity and increase physical activity with an emphasis on walking; and
- Establish new or improved pedestrian, bicycle, or transit transportation systems through initiatives such as supporting the Friends of the Lower Appomattox River (FOLAR) and Bike Walk Petersburg with soon-to-begin expansions to the Appomattox River Trail and other initiatives to promote biking and walking (pHOPPs, 2019).

As part of this initiative, pHOPPs disseminated a community survey to collect qualitative data from Petersburg residents. The Community Survey was administered at community events including the Beyond ACEs Summit held in Petersburg in August 2019, the Westview Early Childhood Education Center Parents' Resource Fair, and at the Petersburg Public Library. The target audience for survey participants was Petersburg residents; therefore, only responses from Petersburg residents were included in the analyses. These are some of the results of the Community Survey as it relates to food access:

- 78 percent of Petersburg residents expressed interest in mobile markets. This was measured by the percentage of residents who responded yes when asked, “If there was a mobile market that came to your neighborhood, a local church or school, on a scheduled day and time, would you visit it?”
- 85 percent of Petersburg residents expressed interest in activating the Petersburg Public Library as a food distribution site. This was measured by the percentage of residents who responded yes when asked, “If the Petersburg Public Library sold locally grown fresh fruits and vegetables and/or ready-to-eat meals on scheduled days and times, would you buy these types of items at the library?”
- 49 percent of Petersburg residents were not familiar with the River Street Farmer’s Market, and 63 percent did not know that the River Street Farmer’s Market participates in the SNAP-match program.
- 73 percent of Petersburg residents said they already shop at convenience stores, and 79 percent said they would buy fresh produce from convenience and corner stores if it were sold there (pHOPPs Community Survey, 2019).

The final recommendations of this report consider information collected by the pHOPPs initiative.

Recommendations

Based on the data collected through this process, there are five key recommendations offered in this report. These recommendations fall within two categories, the first of which provides short term strategies to address food accessibility immediately through programming. The second category focuses on longer term strategies that will take a combination of programming and infrastructure improvements. All these recommendations are aimed at improving food access in Petersburg.

Get Food to the Food Deserts

As noted above, 20 percent of people in the target area do not have access to a car. Considering the intersection of transportation challenges and food insecurity, it is important to provide potential solutions that reduce barriers to access. Fully 95 percent of all survey respondents, and 100 percent of people with children and people with financial need identified “close to my house” as an important factor in determining where to shop. With this in mind, the short-term recommendations are to implement mobile markets, expand grocery delivery and pickup, and to increase the number of food bank distribution sites.

Mobile Grocery Stores and Markets

As mentioned above, 78 percent of respondents to the pHOPPs' Community Survey (2019) said they would visit a mobile grocery or market to purchase food, and Petersburg should explore the possibility of implementing this approach, perhaps as a pilot project. First, Petersburg should conduct a formal study to identify the full scope of the "unmet demand" for grocery items, or "leakage" in its neighborhoods and to reach out to the Petersburg Healthy Community Action Team (HCAT) which has been investigating mobile grocery stores and visiting localities already deploying them. However, it is first necessary to estimate the number of customers required to make a market viable.

The Community Development Financial Institutions Fund (CDFIF) (2012) publication, "Searching for Markets: The Geography of Inequitable Access to Healthy & Affordable Food in the United States," offers a detailed discussion of leakage and an explanation for how knowledge of the economic landscape can help determine viable strategies for increasing access to food. The CDFIF describes leakage, in financial terms, as "a measure of retail sales lost by a community to a competitive market, indicating the need for more retail development in an area." Sales "leaked out" of an area represent the unmet demand for food in a community. So, a leakage figure captures the current amount of food that residents of an area purchase at another location. To calculate leakage, two amounts must be known: the existing amount of food that residents of the area purchase, and the total food sales occurring within the study area. If the total demand for food exceeds the total sales from stores, the difference in food sales is "leaked out."

The CDFIF calls areas with low access to healthy, affordable food "LSAs" ("Limited Supermarket Access"). Most LSA areas have demand in excess of what is captured by existing stores. The excess demand may indicate that the existing stores have limited selections or that they are inaccessible to area residents; either way, residents are shopping elsewhere to meet their food needs. Leakage estimates, combined with local market knowledge, in-store observations, and population spatial and density evaluations, can help define the parameters for proposed interventions to address unmet or inadequately met local demand for food. According to the CDFIF, LSA areas with less than \$6 million in estimated unmet demand are areas in which the most appropriate strategy can be either to upgrade existing stores or to introduce alternative approaches, such as mobile markets, farmers' markets, a store delivery program, or improved transportation to an existing store.

The South King County (Seattle) mobile grocery (PUG) feasibility study, by Briejer and Carbarry (2016), offers a thought process model to estimate the number of potential customers and potential annual gross sales from a mobile operation. Briejer and Carbarry assume only 0.5 percent of the population of each neighborhood or city in PUG's target market would become customers of PUG, and these customers would spend just ten percent of their grocery budgets at PUG. Note: PUG only sells fresh produce; a mobile operation with a wider assortment of goods such as proteins, dry goods, canned goods, etc., might increase the grocery budget expenditure percentage.

To estimate potential gross PUG sales, Briejer and Carbarry (2016) looked at the total population of each neighborhood or city in PUG's target market (over 330,000 people), the average income per household (\$52,626), the average number of individuals per household (2.6), and the overall average percentage that Washington State residents spend on food compared to their income (12.8 percent). In their study's community survey, South King County individuals stated that they spent an average of \$28 per week on fresh fruits and vegetables. By combining this data with data from the Bureau of Labor Statistics (2019) Consumer Expenditure Surveys, the study assumes, on average, residents spend approximately 12.8 percent of their income on food. Of that, 59 percent is spent on food prepared at home (i.e., groceries). Using this percentage, they calculate an approximate amount spent on grocery items in the target neighborhoods and multiply this amount by the appropriate variables to derive the amount that could be converted to weekly sales of fresh fruits and vegetables by PUG.

Expand Grocery Delivery and Pickup

Grocery delivery and pickup services are an emerging industry that allows people to save time and money. While pickup services do not eliminate transportation barriers, delivery options offer a solution for people without cars to access full-service grocery options. Primary grocery store chains in Petersburg include Wal-Mart and Food Lion, and while some Walmarts offer grocery pickup and delivery, the Petersburg location does not deliver. Food Lion uses an Instacart service for their customers to order food and have it delivered to their front door, and this option is currently available for Petersburg residents. Delivery services being offered from the Petersburg location would, in part, address the issue of food access in the city. It is important to consider that there is only one Walmart in Petersburg, and it is located on the city's southside. Residents in other parts of town may find it challenging to travel across the city for groceries due to distance and a lack of adequate transportation. Delivery options close the gap

between residents in areas such as the northside and fresh foods. To incentivize participation in delivery services for Walmart and other grocers, local government could partner with them to help subsidize the cost of delivery for low-income residents.

Utilize Local Organizations to Increase Food Bank Accessibility

Developing partnerships between food banks and existing organizations that address the challenge of food access in the City of Petersburg is a short-term solution that addresses the immediate needs of food insecure residents. Both Feed More in Richmond and Chesterfield Food Bank already serve Petersburg through several of their food distribution programs, such as Meals on Wheels (Feed More) and Food on the Move (Chesterfield Food Bank). There are also several churches and community organizations that utilize the services and run a food pantry out of their establishments. Increasing access to these services as well as increasing the number of services available throughout the city would provide free and consistent food options for those who are food insecure.

Increase Awareness of Existing Farmer's Markets

Farmers markets are markets in which two or more farmer vendors are selling agricultural products directly to consumers in a recurrent physical location (Agricultural Marketing Service, 2019). They can be for-profit business ventures or nonprofit-based organizations. When our survey asked residents of Petersburg how they want to access food within their communities, one of the top three answers was farmer's markets and farm stands. However, based on the Community Survey through pHOPP, 45 percent of respondents are not familiar with the River Street Farmer's Market and 63 percent do not know that the River Street Farmer's Market participated in the SNAP-match program. The SNAP-Match allows families to double the value of their money when purchasing fresh produce and serves as an incentive to purchase healthier food options. This recommendation is a cost-effective way to promote a quick increase in healthy food accessibility through using a marketing campaign to build awareness of the River Street Market and the SNAP-match program it offers.

Improve Healthy Offerings/Environment at Existing Food Retailers

Bringing food into food deserts must also be met with improvements to existing food suppliers. While some areas of Petersburg are considered food deserts, convenience and

corner stores, independent and small grocery stores, and national chains like Family Dollar with limited food options have thousands of square feet dedicated to food sales. The next set of recommendations examines ways of activating these spaces for increased access to food.

Our survey revealed that 95 percent or more of all survey participants cited “high quality fresh produce,” “atmosphere (cleanliness, safety, etc.),” “affordable prices,” “customer service,” and “close to my house,” as important reasons when choosing where to shop. These priorities, and the fact that 76 percent of respondents want a full-service, traditional grocery store, argue for making improvements to existing stores in order to meet the desires of Petersburg residents. The next set of recommendations are to partner with convenience and grocery stores to increase healthy options, and to improve Petersburg store environments.

Partner with Convenience and Grocery Stores to Increase Healthy Options

While research has affirmed the positive correlation between access to convenience stores and higher rates of obesity, there are emerging efforts to see corner stores as assets that can be leveraged for communal benefit instead of weakness (Gebauer & Laska, 2011).

The most common approach to utilizing convenience stores to address food insecurity is to help them expand their offerings to include healthier options, such as fruits and vegetables. Changing their selection of foods can reverse the negative stigma surrounding convenience stores, and this provides a cost-effective method of improving access to healthier food options as opposed to opening a new grocery store. Expanding food options applies to existing stores like the IGA and Family Dollar as well. Whether adopting the Healthy Corner Stores Initiative programmatic framework or offering government-based incentives that include grant funds and training for business owners, there are several ways to approach expanding food options in existing stores. These include:

- Increasing store capacity, including funding, to sell and market healthy items in order to improve healthy options in communities;
- Offering training and technical assistance to store owners to provide the skills to make healthy changes profitable;
- Marketing healthy messages to youth and adults to encourage healthy eating choices;
- Hosting in-store community nutrition education lessons;
- Educating youth in schools near targeted corner stores to reinforce healthy messages and provide nutrition education;
- Linking corner store owners to community partners, local farmers, and fresh food suppliers to create and sustain healthy corner stores;
- Offering wellness and health services, such as free blood pressure checks and referrals by a health care provider to customers; and

- Providing in-store nutrition education lessons which include cooking demonstrations and free taste tests.

Improve Petersburg Store Environments

Beyond expanding the healthy options offered, physical improvements to the interiors and exteriors of the existing convenience stores and grocery stores is necessary. Nearly all survey respondents (99 percent) selected “atmosphere (cleanliness, safety, etc.)” as one of the most important factors when choosing where to shop. This means adding fresh produce alone may not be enough to change shopping behaviors. Investing in new displays, completing facade improvements, and providing training on display and inventory management—all play a role in the decision to purchase food. Government-based incentives, using grants and resources to subsidize the cost of improvements, can help kick start changes. Other cities, including Richmond, encourage local business owners to invest in their property by providing access to low-interest capital and cost-reimbursement grants.

Explore City, State, and Federal Economic Development Incentives and Tax Benefit Programs (Opportunity Zones and Enterprise Zones)

Petersburg should explore all city, state, and federal economic development incentives and tax benefit programs available to support public and private investment in retail or other food enterprises. Two major opportunities are offered by Petersburg’s designation (portions) as both an “Enterprise Zone” and an “Opportunity Zones.” The Fredericksburg Food Co-operative project is an example of how incentives associated with these zones might support new or expanded options for food access. Each of these zones overlaps with areas that have the lowest income, highest unemployment, and highest lack of vehicle access rates in Petersburg.

Opportunity Zones

A portion of the City of Petersburg is classified as a Virginia “Opportunity Zone.” Opportunity Zones are a federal economic development and community development tax benefit established as part of the 2017 Tax Cuts and Jobs Act. This is an economic and community development tax incentive that provides an avenue for investors with capital gains to support, via long-term private investment, distressed communities in low-income urban, suburban, and rural census tracts that have experienced uneven economic growth and recovery. These tracts were eligible for nomination based on 2015 and 2016 American

Community Survey data and Virginia nominated the maximum number of census tracts allotted; the designations are permanent until December 31, 2028. The tax incentive offers three benefits--tax deferral, tax reduction through long-term investment, and exclusion of certain capital gains tax.

Taxpayers can get capital gains tax deferral for making timely equity investments in Opportunity funds that then deploy capital into Opportunity Zone business and real estate ventures. Opportunity Virginia (2019) manages the program. It was formed by Virginia Community Capital and its subsidiary, LOCUS Impact Investing, to build out an Opportunity Zone Market. Opportunity Virginia is supported by Virginia's Department of Housing and Community Development and its Secretary of Commerce and Trade. At the federal level, Opportunity Now (2019) organizes more than 25 federal entities to assist with providing social services and other support that may be necessary for community revitalization to take place within Opportunity Zones.

Example: Fredericksburg Food Co-operative Opportunity Zone Fund

The Fredericksburg, Virginia, Food Co-op plans to open a full-service grocery store and is using Fredericksburg's Opportunity Zone designation to raise the funds (\$1.5 million) needed to open the new store in 2020. Investors are expected to access the fund by the end of 2019; they will be able to defer the payment of taxes on capital gains and, under certain circumstances, avoid taxes on gains obtained through their investment in the fund (Jett, 2019, November 10). Additionally, the Co-op was granted a Tourism Zone performance agreement by the city council which provides for an annual incentive grant from the Fredericksburg Economic Development Authority (Jett, 2019, November 10). The Co-op has been accepted into the National Co+op Grocers (NCG) group, which gives members access to wholesale pricing on items that are not locally grown or produced, and it also helps with training, marketing, and other grocery-related services (Dyson, 2019, October 4).

The store will be open to its nearly 1,250 members as well as to nonmembers, but because it is owned by members, any profits will stay local. The cooperative will work with local suppliers, providers, and farmers, and will offer local foods, natural and organic products, and sustainable practices— “more than just another place to shop,” according to its website (Fredericksburg Food Co-op, 2019).

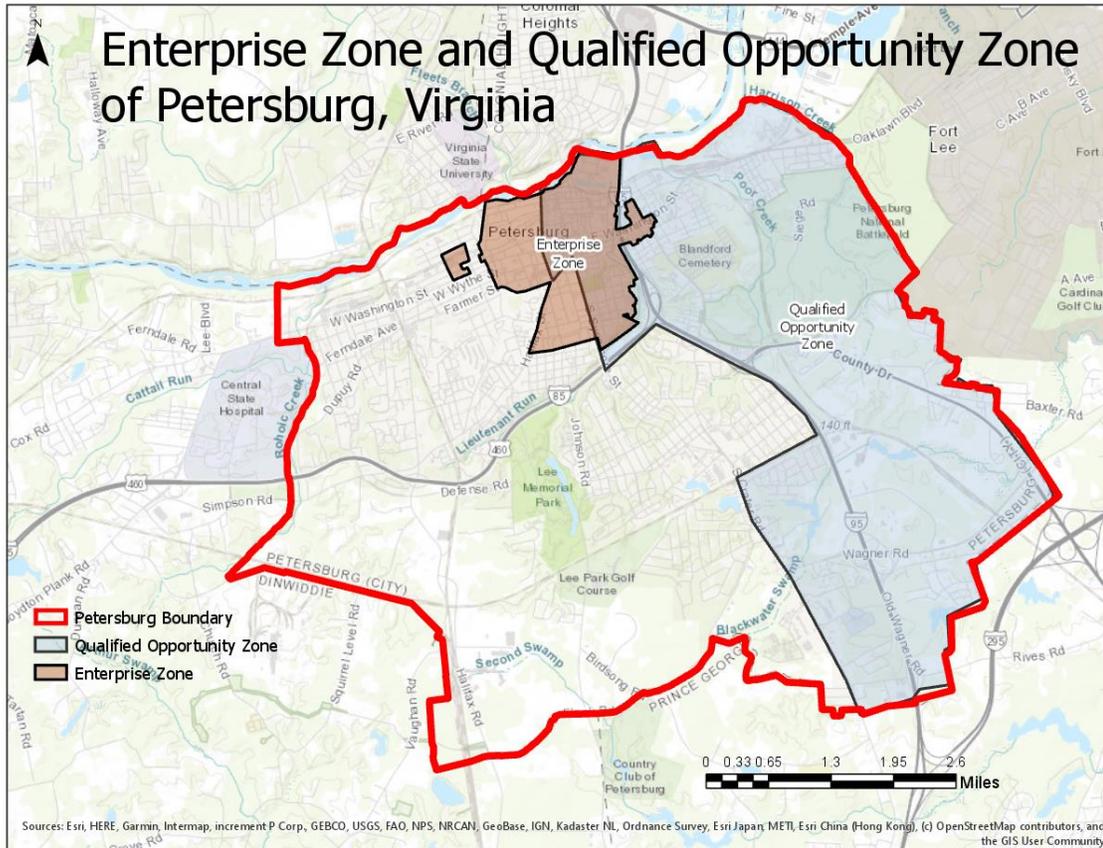
The Fredericksburg Food Co-operative Opportunity Zone Fund offers a tangible example of how Petersburg's Opportunity Zone status might help support the establishment of a new grocery store or other retail food endeavor.

Enterprise Zones

A portion of the City of Petersburg is classified as a Virginia Enterprise Zone (VEZ), a Commonwealth of Virginia economic development program encouraging place-based job creation and private investment. Managed by the Commonwealth of Virginia Department of Housing and Community Development (DHCD) (2019a), the VEZ program offers state and local incentives for businesses to locate or expand within the designated zones and offers specifically real property investment grants and wage-based job creation grants. These grant-based incentives are the Job Creation Grant (JCG) and the Real Property Investment Grant (RPIG); the locality is expected to offer local incentives as well.

Qualification for the Job Creation Grant (JCG) is based on permanent full-time job creation over a four-job threshold, wage rates of at least 175 percent of the federal minimum wage (150 percent in High Unemployment Areas), and the availability of health benefits. Personal service, retail, and food and beverage positions are not eligible to receive job creation grants. Eligibility for the Real Property Investment Grant (RPIG) is based on qualified investments made to commercial, industrial, and mixed-use buildings or facilities located within the boundaries of an enterprise zone. To be eligible for the RPIG, an individual or entity must invest at least \$100,000 for rehabilitation or expansion projects and at least \$500,000 for new construction projects. The "Virginia Enterprise Zone Grant Matrix" provides more information about state incentive eligibility criteria and grant awards (Commonwealth of Virginia, Department of Housing and Community Development, n.d.).

Petersburg can evaluate its current inventory of vacant property (City-owned or privately-owned) to determine if sites are available to market to investors or developers that might qualify for Enterprise Zone Job Creation Grants or Real Property Investment Grants.



Summary and Conclusion

The City of Petersburg has long suffered with issues concerning food accessibility. There are several food deserts, or communities with more than 20 percent of residents living below the poverty threshold and at least 33 percent of the population living more than a mile from a supermarket. The lack of access to fresh food can have a negative impact on health conditions and the overall quality of life for residents and their families.

To address this challenge, we have provided several recommendations. These include the implementation of mobile markets, expansion of grocery delivery and pickup services, partnerships between local organizations such as churches, schools, and food banks, initiatives to increase resident awareness of farmer's markets, and encouraging existing retailers to improve their offerings and environments.

There is tremendous potential for the City of Petersburg to close the food accessibility gap and improve the quality of life for all residents. With partnerships between City agencies, nonprofits, and private-sector partners, this vision can be realized. It is our belief that the

recommendations provided can guide the City and its agencies, merchants, residents, and other stakeholders toward achieving the vision of a revitalized, prosperous, and inclusive Petersburg.

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Appendices

Appendix A: All Food Retailers in Petersburg Area

All Food Retailers					
Business	Address	City	State	Zip	Business Description
7-Eleven	225 E South Blvd	Petersburg	VA	23805	Convenience Store
7-Eleven	701 S Crater Rd	Petersburg	VA	23803	Convenience Store
American Choice Deli	847 W Washington St	Petersburg	VA	23803	Convenience Store
BP	2016 W Washington St	Petersburg	VA	23803	Convenience Store
Exxon	1450 W Wythe St	Petersburg	VA	23803	Convenience Store
Exxon	2205 S Crater Rd	Petersburg	VA	23805	Convenience Store
Gulf	2743 S Crater Rd	Petersburg	VA	23805	Convenience Store
Kwik Mart	2328 E Washington St	Petersburg	VA	23803	Convenience Store
Liberty Mart	140 E Washington St	Petersburg	VA	23803	Convenience Store
Little Food Mart	902 Halifax St	Petersburg	VA	23803	Convenience Store
Marathon	615 E Washington St	Petersburg	VA	23803	Convenience Store
Market Place	110 W Washington St	Petersburg	VA	23803	Convenience Store
MARKET PLACE #2	2706 S Crater Rd	Petersburg	VA	23805	Convenience Store
Midget Mart	1420 W Washington St	Petersburg	VA	23803	Convenience Store
Miller Mart	1200 Courthouse Rd	Petersburg	VA	23803	Convenience Store
Mobil	2156 County Dr	Petersburg	VA	23803	Convenience Store
Parham's Service Center Inc	1901 S Sycamore St	Petersburg	VA	23805	Convenience Store
Petersburg Food Mart	1500 E Washington St	Petersburg	VA	23803	Convenience Store
Pure	1804 W Washington St	Petersburg	VA	23803	Convenience Store
Quik Stop	715 E Washington St	Petersburg	VA	23803	Convenience Store
Qwick Stop	8 E Wythe St	Petersburg	VA	23803	Convenience Store
Salem & Son Inc	1908 Boydton Plank Rd	Petersburg	VA	23805	Convenience Store
Sheetz	151 Wagner Rd	Petersburg	VA	23805	Convenience Store
Shell	3140 S Crater Rd	Petersburg	VA	23805	Convenience Store
Shell	328 Rives Rd	Petersburg	VA	23805	Convenience Store
Shorts Grocery	300 Mistletoe St	Petersburg	VA	23803	Convenience Store
Star Express County Drive LLC	2127 County Dr	Petersburg	VA	23803	Convenience Store
Valero Food Mart	1740 Boydton Plank Rd	Petersburg	VA	23805	Convenience Store
Wawa	3199 S Crater Rd	Petersburg	VA	23805	Convenience Store

Business	Address	City	State	Zip	Business Description
River Street Market	30 River Street	Petersburg	VA	23803	Farmers Market
Cares Inc.	120 E Washington St	Petersburg	VA	23803	Food Pantry
Colonial Heights Food Pantry	530 Southpark Blvd	Colonial Heights	VA	23834	Food Pantry
Aldi	465 Charles H Dimmock Pkwy	Colonial Heights	VA	23834	Grocery Store
Bristow Market	1105 W Washington St	Petersburg	VA	23803	Grocery Store
First Food Market	705 W Washington St	Petersburg	VA	23803	Grocery Store
Food Lion	2120 S Crater Rd	Petersburg	VA	23805	Grocery Store
Food Lion	20821 Woodpecker Rd	South Chesterfield	VA	23803	Grocery Store
Fort Lee Commissary	400 Shop Rd, Bldg 1600	Fort Lee	VA	23801	Grocery Store
Four Star	1905 Johnson Rd	Petersburg	VA	23805	Grocery Store
Halifax Supermarket	303 Halifax St	Petersburg	VA	23803	Grocery Store
Harrison Supermarket	1900 W Washington St	Petersburg	VA	23803	Grocery Store
IGA Supermarket	15 S Adams St	Petersburg	VA	23803	Grocery Store
J's Groceries	1136 Halifax St	Petersburg	VA	23803	Grocery Store
Rme Inc	1900 W Washington St	Petersburg	VA	23803	Grocery Store
Save A Lot	2001 S Crater Rd	Petersburg	VA	23805	Grocery Store
Target	721 Southpark Blvd	Colonial Heights	VA	23834	Grocery Store
Try Me Supermarket	1614 Halifax St	Petersburg	VA	23803	Grocery Store
Walmart	671 Southpark Blvd	Colonial Heights	VA	23834	Grocery Store
Walmart	3500 S Crater Rd	Petersburg	VA	23805	Grocery Store
The Storehouse	2791 S Crater Rd	Petersburg	VA	23805	Health Food Store
Adriana's Mini Market	2645 County Dr # S	Petersburg	VA	23803	International Mini Market
Goodness & Mercy International Food Market	1933 E Washington St	Petersburg	VA	23803	International Mini Market
Harrison's Fish Market	1914 W Washington St	Petersburg	VA	23803	Seafood Market
Lee's Fish House	1728 W Washington St	Petersburg	VA	23803	Seafood Market
Dollar General	2131 E. Washington St	Petersburg	VA	23803	Variety Store
Dollar General	2201 W Washington St	Petersburg	VA	23803	Variety Store
Dollar General	25100 Hofheimer Way	Petersburg	VA	23803	Variety Store
Dollar General	3105 S Crater Rd	Petersburg	VA	23803	Variety Store
Dollar Tree	3330 S Crater Rd	Petersburg	VA	23803	Variety Store
Family Dollar	250 W. Washington St	Petersburg	VA	23803	Variety Store
Business	Address	City	State	Zip	Business Description

Family Dollar	4300 Boydton Plank Rd	Petersburg	VA	23803	Variety Store
Family General	798 Halifax St	Petersburg	VA	23803	Variety Store
Family General	2075 S Crater Rd	Petersburg	VA	23803	Variety Store

Appendix B: Petersburg Food Access Preference Survey

As part of the Neighborhood Revitalization graduate course at Virginia Commonwealth University under the direction of Dr. John Accordino, our class is partnering with the City of Petersburg to learn about food access opportunities and challenges in Petersburg. Our goal is to suggest potential strategies to increase access to food, especially in areas without grocery stores.

In order to accomplish that goal, we first need to hear from you! Please take a few minutes to complete this short survey so we can make sure our strategies match what residents actually want. These surveys are anonymous, optional, and there are no right or wrong answers. The more honest you are, the more likely we are to find strategies that will work for you. Thank you for your participation!

Food Shopping Habits

(Please circle the response that most closely matches your answer)

How often do you buy groceries?

1x per month / 2x per month / 1x per week / 2-3x a week
/ Not applicable

How long does it take you to get to the grocery store where you usually shop?

less than 10 minutes / 10-19 minutes / 20-29 minutes / 30 minutes or more
/ Not applicable

How do you get to the store?

Car / Bus / Walk / Bike / Ride service (Uber, Lyft etc.)
/ Get a ride / Other: _____

Do you do at least 50% of the food shopping for your household?

Yes / No / I don't know

*How many **adults** do you buy groceries for (please include yourself)?* 1 / 2 / 3 /
4 / 5 or more

*How many **children** do you buy groceries for?* 0 / 1 / 2 / 3 / 4 / 5 or more

*When deciding where to shop, what is important to you? **Check one box for each category below.***

	Very Important	Somewhat Important	Not Important
Accepts SNAP, WIC or other food assistance program			
Affordable prices			
Atmosphere (cleanliness, safety etc.)			
Close to my house			
Close to work			
Customer service			
Delivery (Food delivered to my house.)			
Good selection			
High quality, fresh produce			
One-stop shop (food, pharmacy, home goods etc.)			
Other: _____			

Food Preferences

What types of food do you want to buy that are not available in your neighborhood? (Circle all that apply)

Meats: Fresh / Frozen / Canned / Prepared / Luncheon/Deli

Vegetables: Fresh / Frozen / Canned / Prepared

Fruits: Fresh / Frozen / Canned / Prepared

Grains: Bread/ Pasta / Rice / Beans / Cereal / Other grains

Dairy: Eggs / Milk / Yogurt / Butter / Cheese / Ice cream

Snacks: Chips / Cookies / Candy / Other sweet snacks / Other salty snacks

Beverage: Juice / Soda / Bottled water / Alcohol / Juice mix / Diet/zero calorie drinks

OTHER: _____

Where do you get the majority of your groceries now?

Name of Store and Street Name: _____

How would you like to access food within your neighborhood? (Check all that apply)

- Full service, traditional grocery Store (e.g. Food Lion)
- Supercenter or Club Store (e.g., Walmart, Sam's Club)
- Food pantry or food bank
- Convenience store stocked with grocery items
- Co-op (grocery store owned by the community)
- Farmers' market / Farm stand
- I want my groceries delivered.
- Mobile Market (Farmers' Market on wheels that sells locally produced food.)
- I am content with my current situation.
- Other: _____

Getting to Know You

Please read the statements below and check the box most true for you:

	Often true	Sometimes True	Never True	I prefer not to answer
The food I buy just doesn't last, and I usually don't have money to get more.				
I can't afford to eat balanced meals.				

What would make you shop more in your neighborhood? (Please write.)

Where do you live? (Circle your selection)

Ward 1 / Ward 2 / Ward 3 / Ward 4 / Ward 5 / Ward 6 / Ward 7 /

I don't know my Ward / I do not live in Petersburg

Where do you work? (Check all that apply)

- From home
- In my neighborhood
- Outside of my neighborhood, but still in Petersburg
- In a neighboring county or city (within 20 miles)
- Outside the region (more than 20 miles away)
- Not working or retired (non-military)
- Military or retired veteran

What is your racial/ethnic background? (Circle all that apply.)

American Indian / Asian / Black/African American / Latino/a/x / Mixed Race / White /

Other

How old are you? (Circle your selection)

Under 18 / 18-24 / 25- 34 / 35-44 / 45-54 / 55-64 / 65 - 74 / 75+

Thank You!

If you are interested in receiving information shared with the City of Petersburg from this project, please send your request to foodsurveypb2019@gmail.com.

Appendix C: Focus Group Outline

We did not have the opportunity to conduct focus groups during this study. However, we created an instrument to support that work, as follows.

Petersburg Food Accessibility Focus Group Instrument

Date and Time: TBA

Where: Neighborhood Ward Meeting, community room

We will be potentially conducting a focus group during a ward meeting put together in collaboration with Petersburg city officials. The meeting will take place in either ward 1, 4, 5, or 6 to coincide with our identified enterprise and opportunity zones. We will arrive at the location at least 30 minutes before the time of the meeting to set up and talk to the person in charge of the meeting as well as talk to any people already there. If necessary, we can supply water and light snacks. The focus group can be advertised and/or through mailers. Maximum of 20 people.

The focus group will begin at the time listed on the advertisement form. Because it will be conducted at night, it will not go on further than the listed time. Sitting around a table or in a circle is imperative to everyone being able to participate, be seen, and be heard. We will first ask for consent to record the focus group, and if consent is not granted then we will have several people take notes instead. The questions will mirror the surveys in context but will be open-ended to allow elaboration. We will be sure to cover all of the questions either by natural conversational flow or direct asking.

Welcome: Everyone introduce themselves - name, where they're from, age

Topic: Measuring food accessibility in Petersburg and collecting personal stories to complete the narrative for our semester project.

Questions:

1. Opening question - How often do you go grocery shopping?
2. Where are some of your favorite places to grocery shop and why?
3. Talk about your diet. What kinds of foods does it consist of and why?
4. Can you name places in the city that are known for people food shopping there?
5. Are these places close to where you live (potentially ask for specific proximity to home)?
6. How do you usually travel to the store and how long does this take?
7. How many people do you buy groceries for and are they adults and/or children?
8. If you live farther away from a food supplier, what kind of challenges and inconveniences do you face when taking a trip to buy food?
9. Do you believe the stores in your neighborhood or within a one mile radius supply a variety of food for you and your family or are they: too expensive, unhealthy?
10. How often do you cross over city lines for food shopping?

11. What kind of food shopping would you ideally like to partake in and why?

Closing: Thank everyone for their participation and wish everyone a good night.

Appendix D: Flyer



FOOD ACCESS SURVEY

The students of Virginia Commonwealth University's Urban Community Revitalization class are studying the current condition of food sources in the city of Petersburg.

This survey will be a part of the data collection process around the experiences people have purchasing groceries.

All surveys are anonymous can be completed by paper or online!

Participation is easy! This survey takes less than 5 minutes to complete.

Online link:

<https://cutt.ly/AwKo23R>

or

Scan QR Code on the right with smart phone camera



Questions? Send email to foodsurveypb2019@gmail.com