Cuyahoga County
Supermarket Assessment
2018 Inventory Update

Prepared by:

Cuyahoga County Planning Commission
2079 East 9th Street, Suite 5-300
Cleveland, Ohio 44115

Prepared for:

Cuyahoga County Board of Health
5550 Venture Drive
Parma, Ohio 44130

Final Report Issued:

March 8, 2019
TABLE OF CONTENTS

INTRODUCTION AND RECENT WORK................................................................. 3

SUPERMARKET ACCESS STUDY: 2018 UPDATE.............................................. 5
  Refined Inclusion Methodology................................................................. 5
    • Added Existing Stores........................................................................... 5
    • New / Moved Stores.............................................................................. 6
    • Closed Stores........................................................................................ 6

SUPERMARKET ASSESSMENT 2018 INVENTORY UPDATE.............................. 7
  Refined Assessment Methodology.............................................................. 7
    • Food Desert Methodology...................................................................... 7
    • Supermarket Methodology..................................................................... 8
    • Distance from Supermarket Methodology............................................. 9
    • Poverty Threshold Methodology......................................................... 10

NEW DATA & KEY FINDINGS.......................................................................... 11
  • Population............................................................................................... 11
  • Distance from Supermarket................................................................. 12
  • Mobility.................................................................................................. 14
  • African-American Communities......................................................... 15
  • Poverty.................................................................................................... 16
  • Income Density..................................................................................... 17
  • Age Groups............................................................................................ 19
  • Diet Related disease............................................................................... 20

KEY TERMS AND DEFINITIONS...................................................................... 25
INTRODUCTION AND RECENT WORK
The Creating Healthy Communities Initiative brings together community coalitions to identify, implement and evaluate interventions aimed at reducing the leading causes of death, including heart disease, stroke, cancer, diabetes, and chronic lower respiratory disease. The Initiative focuses on policy, environmental, and system changes aimed at modifiable risk factors such as physical activity, nutrition and obesity, cholesterol and blood pressure.

Since the Creating Healthy Communities (CHC) Initiative began in 2010, the Cuyahoga County Planning Commission (County Planning) has assisted the Cuyahoga County Board of Health with carrying out the objectives of the Creating Healthy Communities Initiative. In community settings (the Cities of East Cleveland, Euclid, and Lakewood) and County-wide, the CHC Initiative seeks to reduce health inequities by: (1) examining health issues related to the built environment and land use barriers; (2) focusing on strategies to improve the built environment as a means of promoting healthy behaviors; and (3) facilitating policy, systems, and environmental changes to promote healthy eating and physical activity. County Planning provides professional planning services that include facilitation, outreach, and technical assistance such as GIS-based mapping.

For 2016 and 2017, the Cuyahoga County Board of Health and County Planning focused their efforts on increasing access to healthy food—especially as provided by full-service grocery stores in Low Income Areas. Two noteworthy initiatives provided the incentive and guidance to achieve this goal.

The first was the release in 2015 by the Health Improvement Partnership-Cuyahoga (HIP-Cuyahoga) the Cuyahoga County Community Health Improvement Plan. This Plan, which included a Community Health Needs Assessment, a Community Themes and Strengths Assessment, and a series of HIP-Cuyahoga prioritization meetings, noted that many areas throughout the County—and especially in Cleveland’s core and inner-ring suburbs—lack grocery stores that sell fresh fruits and vegetables.

Through the planning process, the Partnership identified and addressed Healthy Eating and Active Living (HEAL) as a key priority, and noted that Countywide:

- One in four adults is obese;
- Residents named obesity as one of the top five health issues on the HIP-Cuyahoga Quality of Life Survey;
• Residents lack access to transportation, safe places for physical activity, and places to purchase fresh meats and produce;
• Only 25% of adults reported meeting the recommended fruit and vegetable consumption;
• About 50% of all Cleveland residents, and 25% of all Cuyahoga County residents live in a “food desert;” and
• Of the Cleveland residents living in a food desert, 60% describe themselves as “non-white.”

The Cuyahoga County Community Health Improvement Plan is very clear about the importance of healthy food retail in underserved communities, and outlines specific goals designed to improve equitable food access.

The second initiative was the Healthy Food for Ohio (HFFO) program created by the Finance Fund Capital Corporation (FCAP). The HFFO was created in part to address the findings of a 2014 statewide mapping study, “Food for Every Child: The Need for Healthy Food Financing in Ohio.” This study identified rural and urban areas where nearly one million adults and 250,000 children live at the confluence of low supermarket access, low income, and high rates of diet-related death. The HFFO asserted that by providing underserved communities with access to retailers that offer a variety of fresh, affordable and nutritious foods, the initiative could encourage a more nutritiously balanced diet and enable people living on limited budgets to purchase higher quality foods. Other benefits to the community included job creation, contribution to the local tax base, and attracting additional businesses to the area.

Guided by the above two initiatives, the Cuyahoga County Board of Health and County Planning produced the 2016-2017 Community Food Assessment (see http://www.countyplanning.us/projects/creating-healthy-communities/).

The Community Food Assessment was a two-part project: Part 1 (2016) focused on data-gathering; Part 2 (2017) focused on ongoing data assessment, analysis, and dissemination. The work over two project years included a brief overview of prior Cuyahoga County food access studies, community profiles (socioeconomic and demographic), food resource maps and data (locations and types of food distribution resources) for each Cuyahoga County community and City of Cleveland Statistical Planning Area (SPA), key terms and definitions, and a description of the study methodology.
SUPERMARKET ACCESS STUDY: 2018 UPDATE
Refined Inclusion Methodology
During each of the recent local studies of food access, store inventories were developed primarily through licensing records from local Boards of Heath – specifically “Retail Food Establishments”. For the most part, only those stores greater than 25,000 square feet or larger were included. Examples include large chain supermarkets and “big box” stores, such as Giant Eagle and Walmart; as well as other larger grocery stores, such as Dave’s, ALDI and Save-A-Lot. Membership-based stores such as BJ’s and Costco were excluded.

Added Existing Stores
In developing the 2018 store inventory, the criteria for inclusion was adjusted to include the following existing food stores:

- Cleveland’s West Side Market: While still not an every-day “store”, the market has recently added an additional day and is now open 5 days a week, offering a tremendous quantity and variety of foods. The West Side Market is now included in this inventory because of its consistent schedule of open hours, and the overall scale of the Market operation. These characteristics differentiate the West Side Market from the many traditional “farmers markets” in Cuyahoga County, as the latter have limited hours of operation and thus present accessibility challenges to working families.

- Target stores: Two locations are now included (Steelyard Commons and W. 117th), as both have added substantial grocery offerings in recent years. Both locations are, however, already located near other existing supermarkets.

- Trader Joes (Westlake and Woodmere): Adjusted criteria to recognize the full offerings at those stores. Both are largely outside of low-income areas.

- The Save-A-Lot at 7210 Superior Avenue was inadvertently excluded from the 2017 inventory and is now included.

Several store openings, relocations, and closures were also observed in the updated inventory of supermarkets and are listed in the following sections.
New/Moved Stores:
- **Constantino’s Market** (18120 Sloane in Lakewood): New store
- **Lucky’s Market** (11620 Clifton in Cleveland (Edgewater)): New store
- **Simons Supermarket** (11501 Buckeye in Cleveland (Buckeye-Shaker)): New store October 2018
- **Mazzulo’s Fresh Market** (East Side Market, 10505 St. Clair in Cleveland (Glennville)): New store February 2019
- **Dave’s Supermarket** (1929 East 61st in Cleveland (Hough)): Moved from 3301 Payne February 2019
- **Fresh Thyme** (30016 Detroit in Westlake): New store
- **Whole Foods Market** (50 Wall Street (Pinecrest) in Orange): Moved from Woodmere

Closed Stores:
- **ALDI** (6711 Broadway in Cleveland (Broadway-Slavic Village))
- **Madison Bi-Rite** (12503 Madison in Lakewood)
- **Dave’s Supermarket** (3301 Payne in Cleveland (Goodrich-Kirtland Park))
- **Dave’s Supermarket** (2500 East 40th Street in Cleveland (Central))

While comparability between years is difficult, the results do indicate a somewhat better overall outlook than shown by the 2017 Supermarket Assessment. Five new supermarkets will be added this year, three of which are in the City of Cleveland. Four stores have recently closed, leaving a net increase of one store for the County. It is notable that of these five new supermarkets, three received various types of public subsidies (low-interest loans, grants, and other public incentives). This highlights the important roles that the public and nonprofit sectors play in improving supermarket access.
SUPERMARKET ASSESSMENT 2018 INVENTORY UPDATE
This report, Supermarket Assessment 2018 Inventory Update, builds on the most recent work completed by the Cuyahoga County Board of Health and County Planning. As an update, the report notes refinements to the assessment methodology, the most recent openings and closures of supermarkets within Cuyahoga County, new data, and updated key findings.

Refined Assessment Methodology
This inventory, as of December 2018, includes 158 supermarkets in Cuyahoga County; also included in the analysis are a number of stores outside the County, located within one and one-half (1½) miles of the County border. The 2018 study used nearly identical methods as the 2017 study, but direct comparisons between the two studies introduced mismatches between data applications, as defining criteria for the local supermarket inventory had changed slightly, and prior oversights were noted and corrected.

In each of these recent studies, “food desert” areas are generally defined as low-income areas more than ½ mile from the nearest supermarket. The distance and income thresholds reflect the difficulty of poorer households in reaching a nutritious source of food with limited transportation options and limited incomes.

- Food Desert Methodology
  - Food deserts are areas typified by a combination of limited access to grocery stores that can supply a full healthy diet. Access can be limited both by proximity (distance) and by income, since low-income households often have fewer transportation options and more stressors resulting from having limited incomes.

  - While the US Department of Agriculture (USDA) has published findings and data as recently as 2015, we found the base data on stores to have too many unknowns, and are not responsive to changes in the local retail landscape.

  - First, the actual location, names, and types of stores used by the USDA analysis is unknown. A total of 299 stores were identified in its 2012 inventory for Cuyahoga County, compared to only 179 “large stores” in our local 2017 inventory.
Using the USDA data has its drawbacks. Since the agency (for its study) merged a data set containing major SNAP grocery outlets and a commercially-provided grocery store inventory, we have no way of knowing the details behind that data set or the criteria used in the analysis. This led to discoveries of major discrepancies in findings. For example, both USDA and Cuyahoga County used the same distance threshold of greater than ½ mile from grocery store to determine population characteristics. Whereas use of the USDA criteria found a population of 770,993 persons, the Cuyahoga County analysis (with its “cleaner” data sets) found a population of 967,190 persons—a difference in population of about 20%—even when using the same distance threshold.

Second, the USDA store inventory continues to reflect a snapshot from 2015. As is well known, the grocery landscape is ever-changing. During 2018, several stores have opened, closed, or moved. So, in addition to providing a late-2018 snapshot that is presented in our study findings, our store inventory will be driven by local Boards of Health inspection systems. As stores open and close, our local boards of health will be able to update the analyses to assess the impact of these changes on communities throughout the County and propose policies to minimize any adverse impacts.

**Supermarket Methodology**

As noted above, the 2018 store inventory was developed primarily using Retail Food Establishment licensing data provided by the Cuyahoga County Board of Health and Cleveland Department of Public Health. The inventory was supplemented by stores just outside the county, using “google maps” searches and other sources.

Again, consistent with similar local studies conducted since 2011, only “medium” and “large” stores were considered for the inventory. Medium sized stores are typically 10,000-25,000 square feet in size, and include locally available chains such as Marc’s, Aldi, and Save-A-Lot. Large stores are typified by supermarkets over 25,000 square feet. Local examples include Walmart, Giant Eagle, Heinen’s, and most Dave’s stores. Excluded from the study were the large membership ‘clubs’ such as Sam’s Club, BJ’s, and Costco.
o No distinction between store sizes was made in conducting the analysis, but it does provide context in assessing an appropriate mix of future store development.

o The goal of this study was to capture all supermarkets that could arguably provide consistent supermarket access and support families in the surrounding communities. The methodologies employed were not intended to assess quality of any given supermarket.

• **Distance from Supermarket Methodology**

  o Consistent with its 2017 study of food deserts, Cuyahoga County used a ½ mile distance from the nearest supermarket as a threshold for ‘walkability’. Distances were measured from 187 store locations to the centroid of each of the county's 15,000-plus blocks – the smallest available unit of census geography. The average census block in Cuyahoga County is 0.03 square miles, compared with other commonly used units such as block groups (1,165 units, 0.4 square miles) and tracts (447 units, 2.8 square miles).

  o Ordinarily, only decennial census data is available at the block level, which includes total population, age, sex, households, and some racial breakdowns. Using 2010 proportions of population and households in the larger census block group level, we were able to estimate much more detailed indicators down to the block level, including income and poverty measures, access to vehicles, and more.

  o As with the 2017 study, distance to supermarket was calculated through the street network, instead of Euclidian straight-line distance (“as the crow flies”). The street network approach allows for a more accurate depiction of access, forcing travel through the available street network, as well as accounting for physical barriers like river valleys and interstate crossings.
- **Poverty Threshold Methodology**
  - A poverty threshold was adopted from the State of Ohio’s standard for eligibility for its Emergency Food Assistance Program (“food banks”), for which households qualify if their income is below 200% of the federal poverty. In 2014, that equates to a household income of about $48,000 for a family of four.

  [https://www.census.gov/data/tables/time-series/demo/income-poverty/historical-poverty-thresholds.html]

  - Areas can only be considered as Food Deserts if more than 30% of its population has income below 200% of the poverty level. In addition, census blocks with fewer than 10 persons were excluded to avoid mischaracterizing large and relatively unpopulated areas (e.g., Hopkins Airport, industrial valley).

  - In summary, to qualify as a food desert, an area must:

    - Be more than ½ mile from the nearest supermarket store; and
    - Have more than 30% of its population with income below 200% of the poverty level.
NEW DATA & KEY FINDINGS

- **Population**
  - More than 442,900 people in Cuyahoga County (35% of the total resident population) live in Food Deserts; and
  - Over 230,700 Cleveland residents (59% of the total City population) are living in Food Deserts.

  - The higher percentage in the City of Cleveland, in part, is attributed to having more of the population living below the poverty threshold when compared to Cuyahoga County as a whole.

**2018 FOOD DESERT POPULATIONS: Cuyahoga County & City of Cleveland**

- **Cuyahoga County**
  - 35% Food Desert
  - 65% Non-Food Desert

- **Cleveland**
  - 41% Food Desert
  - 59% Non-Food Desert
• **Distance from Supermarkets**
  For many residents, particularly seniors, those without personal vehicles, and people with disabilities, distance is a significant barrier to supermarket access. The chart below depicts affected food desert populations at various distances from their nearest supermarket.

  - Over 262,500 (59.3%) of the county's residents live between ½ and 1 mile of their nearest supermarket.
  - Over 165,000 residents (37.4%) live more than 1 mile from a supermarket; and
  - Nearly 14,500 residents (3.3%) live more than 2 miles away.

**2018 DISTANCE FROM SUPERMARKET: Food Desert Populations, Countywide**

In many Cleveland neighborhoods and suburban communities, even greater shares of low-income residents travel those longer distances (the following charts provide a view of both individual cities and Cleveland neighborhoods).
2018 DISTANCE FROM SUPERMARKET: Food Desert Populations, SPAs & Communities

Cuyahoga County Communities

City of Cleveland Neighborhoods

- Beachwood
- Bedford
- Bedford Heights
- Berea
- Brook Park
- Brooklyn
- Cleveland
- Cleveland Heights
- Cuyahoga Heights
- East Cleveland
- Euclid
- Fairview Park
- Garfield Heights
- Highland Hills
- Lakewood
- Linndale
- Maple Heights
- Mayfield Heights
- Middleburg Heights
- Newburgh Heights
- North Olmsted
- North Randall
- North Royalton
- Oakwood
- Olmsted Twp
- Parma
- Parma Heights
- Richmond Heights
- Shaker Heights
- South Euclid
- Strongsville
- University Heights
- Valley View
- Warrensville Heights
- Woodmere
- Cuyahoga County

- Cleve: Bellaire-Puritas
- Cleve: Broadway-
- Cleve: Brooklyn Centre
- Cleve: Buckeye-
- Cleve: Buckeye-
- Cleve: Central
- Cleve: Clark-Fulton
- Cleve: Collinwood-
- Cleve: Cudell
- Cleve: Cuyahoga Valley
- Cleve: Detroit-
- Cleve: Downtown
- Cleve: Edgewater
- Cleve: Euclid-Green
- Cleve: Fairfax
- Cleve: Glenville
- Cleve: Goodrich-
- Cleve: Hough
- Cleve: Jefferson
- Cleve: Kamm's
- Cleve: Kinsman
- Cleve: Lee-Harvard
- Cleve: Lee-Seville
- Cleve: Mount Pleasant
- Cleve: North Shore-
- Cleve: Ohio City
- Cleve: Old Brooklyn
- Cleve: St. Clair-Superior
- Cleve: Stockyards
- Cleve: Tremont

0% 20% 40% 60% 80% 100%

- 0.5 to 1 Mile
- 1 to 2 Miles
- 2 Miles or More

0% 20% 40% 60% 80% 100%

- 0.5 to 1 Mile
- 1 to 2 Miles
- 2 Miles or More
**Mobility**
Access to transportation is key for low-income households. Looking more specifically at the issue of access to transportation, we find that in Cuyahoga County, approximately 36,700 households have no vehicle available – nearly 20% of all food desert households. This compares to non-food desert areas where only 11% of households have no vehicle.

In the City of Cleveland, access to transportation is a more pervasive issue, with about 26% of households having no vehicle available – both in food desert and non-food desert areas.

**HOUSEHOLDS WITHOUT VEHICLES, Countywide**

**HOUSEHOLDS WITHOUT VEHICLES, City of Cleveland**
**African-American Communities**

Minority communities are disproportionately affected – both by access to supermarket and related health effects.

In Cuyahoga County, over 220,900 persons (50%) living in food deserts are African-American. In non-food desert areas of the County, only about 21% of the population is African-American.

In the City of Cleveland, the disparity is less severe, where about 135,500 (59%) of food desert residents are African-American vs. % residents of non-food desert areas.
**Poverty**
As noted above, the poverty threshold used in this study includes areas where over 30% of the population is below 200% of the poverty level.

The study also applied the much lower ‘standard’ poverty level, in which a family of four would make $24,091 or less per year. The charts below depict this lower standard which indicates that nearly 30% of Cuyahoga County Food Desert households fell below that mark. In the City of Cleveland, over 39% of Food Desert residents lived below the poverty level.

**PERCENT BELOW POVERTY LEVEL, Countywide**

**PERCENT BELOW POVERTY LEVEL, City of Cleveland**
**Income Density**

While food desert areas are partly by definition “low-income”, due to higher population densities in many urban neighborhoods, their aggregate buying power is still comparable or above many non-low-income areas.

The Census Bureau reports that Cuyahoga County had an aggregate annual income of over $34 billion. After dividing by the County area, we see an average income density of $75 million per square mile.

Food Desert areas as a whole had incomes of $91 million per square mile – $7.8 billion in total. Nineteen cities and twenty-four Cleveland Neighborhoods had income densities that exceeded the County average.
**Age Groups**
Another sub-population of great concern are children (under age 18) and elderly (age 65 and over).

About 38% (106,928) of all Cuyahoga County children live in Food Deserts; in the City of Cleveland, 65% (59,512) of all children live in Food Deserts.

**PERCENT OF POPULATION UNDER AGE 18**

Similarly, the majority of the City’s senior population resides in Food Desert areas. Nearly 57% (27,595) of Cleveland’s senior population reside in Food Deserts, while 30% (61,339) of County seniors live in Food Deserts.

**PERCENT OF POPULATION AGE 65 AND OVER**
**Diet-related Disease**

Of great concern in this study is the connection between limited access to supermarkets and diet-related health outcomes. A variety of studies have linked health outcomes to diet, a few of which are summarized by the US Department of Agriculture: Food Choices & Health and The Food Trust: Access to Healthy Food and Why it Matters.

To investigate local relationships between food access and health outcomes, the Cuyahoga County Board of Health obtained preliminary Disease Death Rate data from the Ohio Department of Health. Age-adjusted death rates (per 1,000 persons) were made available by census tract, covering the period 2011-2016, including deaths from Heart Disease, Stroke, Cancer, and Diabetes (see Figures 1 to 4 on the following pages).

Rates for each census tract were then converted to a quartile score, where “1” represents a disease death rate in the lowest quarter of all census tracts, and “4” represents the highest quarter of tracts for that disease rate (see Q1-Q4 in the map legends of Figures 1 to 4).

Each of the quartile scores were then added together to provide a composite score for each census tract in the County (See Figures 5 and 6). At the low end, tracts whose rates were in the lowest quartile for all four disease types would get a composite score of $4 \times 1$ (or 4). If a tract was in the highest quartile for all four disease types, they would get a composite score as high as $4 \times 4$ (or 16).

While cause and effect cannot be clearly identified here, the analysis indicates a strong association between food deserts and poor health outcomes.

Countywide, 84% of the population (380,432 persons) in Food Deserts had disease death rates in the two highest Quartile Scores (Composite Scores ranging from 9 to 16). This compares with only 47% (378,517) in the Non-food Desert population of Cuyahoga County.
Figure 1: Cancer Death Rates, by Tract

<table>
<thead>
<tr>
<th>Cancer Deaths (2012-2016)</th>
<th>Cancer Rate per Thousand</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1</td>
<td>0.0 - 146.1 (107)</td>
</tr>
<tr>
<td>Q2</td>
<td>146.2 - 177.2 (108)</td>
</tr>
<tr>
<td>Q3</td>
<td>177.3 - 216.9 (108)</td>
</tr>
<tr>
<td>Q4</td>
<td>217.0 - 445.7 (108)</td>
</tr>
</tbody>
</table>

Figure 2: Diabetes Death Rates, by Tract

<table>
<thead>
<tr>
<th>Diabetes Deaths (2012-2016)</th>
<th>Diabetes Rate per Thousand</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1</td>
<td>0.0 - 12.0 (107)</td>
</tr>
<tr>
<td>Q2</td>
<td>13.1 - 20.9 (108)</td>
</tr>
<tr>
<td>Q3</td>
<td>21.0 - 33.6 (108)</td>
</tr>
<tr>
<td>Q4</td>
<td>33.7 - 53.2 (108)</td>
</tr>
</tbody>
</table>
Figure 5: Disease Death Rate - Composite Quartile Score

*Includes Quartile Scores for:
- Cancer
- Diabetes
- Heart Disease
- Stroke

Figure 6: Disease Death Rate - Composite Quartile Score (Food Deserts Only)

*Includes Quartile Scores for:
- Cancer
- Diabetes
- Heart Disease
- Stroke
PERCENT OF POPULATION IN TWO HIGHEST HEALTH QUARTILES, Countywide

PERCENT OF POPULATION IN TWO HIGHEST HEALTH QUARTILES, City of Cleveland
KEY TERMS AND DEFINITIONS
The following terms and definitions are essential for understanding the goals and objectives of the Health Improvement Plan-Cuyahoga (HIP-C) report and the Healthy Food Fund Ohio (HFFO) program and will be used as appropriate to inform and guide the Community Food Assessment.

African-American Population: Defined in this study as “Race alone or in combination with one or more races – Black or African-American”. Some health outcomes have a correlation to African Americans as a racial group.

Community Food Assessment: A collaborative and participatory process that systematically examines a broad range of community food issues and assets, and so inform change actions to make the community more food secure. (http://foodsecurity.org/CFS_projects.pd )

Community Garden: A plot of land that is gardened by a group of people to produce fruits, vegetables, flowers, and sometimes chickens for egg production. Community gardens exist in a variety of settings, urban and rural, on vacant lots, at schools or community centers, or on donated land. Food may be grown communally, or individuals or families may have individual garden plots or beds. (http://guides.library.cornell.edu/c.php?g=31298&p=199469)

Chronic Disease: Conditions that keep coming back, or persistent conditions that are the nation’s leading causes of death and disability (i.e., high blood pressure, diabetes, asthma, heart problems, and mental illness). Most of the time, these conditions could have been prevented. They can lead to lifelong disability, and negatively impact an individual’s quality of life due to high health care costs.

Equity: Providing all people with fair opportunities to achieve their full potential.

Farmers Market: A common facility or area where several farmers or growers gather on a regular, recurring basis to sell a variety of fresh fruits and vegetables and other locally-grown farm products directly to consumers. Related Term: Certified Farmers Market -Some states offer or require certification of farmers markets to ensure that the products sold are produced by the farmers themselves. (http://guides.library.cornell.edu/c.php?g=31298&p=199469)
**Food Deserts:** Urban neighborhoods and rural towns without ready access to fresh, healthy, and affordable food. Instead of supermarkets and grocery stores, these communities may have no food access or access only to fast food restaurants and convenience stores that offer few healthy and affordable food options.

NOTE: For the purposes of this study, a Food Desert is defined as any Low Income Area (see below) that is more than one-half mile from a supermarket.

**Food Distribution and Assistance Resources:** Programs that strengthen food security through commodity distribution and nutrition assistance to low-income families and other eligible individuals. ([https://www.nutrition.gov/food-assistance-programs/food-distribution-programs](https://www.nutrition.gov/food-assistance-programs/food-distribution-programs))

- **Food Banks:** Food Banks are distribution hubs. They supply the food to the soup kitchens, food pantries, shelters, and other similar facilities. They in turn provide that food to the individuals that need it. ([http://www.homelessshelterdirectory.org/foodbanks/OHfoodbanks.html](http://www.homelessshelterdirectory.org/foodbanks/OHfoodbanks.html))
- **Food Pantry:** A location, organization or group that sorts and packages donated foodstuffs for distribution directly to people in need. ([http://www.thefreedictionary.com/food+pantry](http://www.thefreedictionary.com/food+pantry))
- **Hot Meal Site:** Locations that offer a place to sit down and eat a hot and nutritious meal* (*Food services and times are subject to change)
- **Supplemental Nutrition Assistance Program (SNAP):** Federal nutrition assistance program that offers benefits to low-income individuals and families and provides economic benefits to communities.
- **USDA** ([http://www.fns.usda.gov/snap/supplemental-nutrition-assistance-program-snap](http://www.fns.usda.gov/snap/supplemental-nutrition-assistance-program-snap))

**Food Insecurity:** Limited or uncertain availability of nutritionally adequate and safe foods or limited or uncertain ability to acquire acceptable foods in socially acceptable ways. ([https://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us/measurement.aspx](https://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us/measurement.aspx))

**Healthy Food Financing Initiative:** The federal **Healthy Food Financing Initiative** (HFFI) supports projects that increase access to healthy, affordable food in communities that currently lack these options.
**Income Density:** All the income for all the households within an area divided by the land area in square miles.

**Institutional Racism:** Discriminatory treatment, unfair policies and practices, and inequitable opportunities and influence within organizations and institutions, based on race.

**Life Expectancy:** The average number of years a population of a certain age is expected to live, given a set of age-specific death rates in a given year.

**Large Grocery Store:** Generally a smaller chain or non-chain store that offers fewer options when compared to a Supermarket. Large Grocery Stores typically offer at least six (6) varieties of fresh fruits/vegetables and offers low-fat milk as an option. Additionally, they offer raw meat (cut in store) and bakery (baked in store), and have five (5) or fewer cash registers. Examples include Marc’s and Aldi.

**Low Income Area:** Defined by the State of Ohio eligibility standard for Food Pantry use, and includes households earning less than 200% of the Federal poverty guideline.

**Note:** For the purposes of this study, any area where more than 30% of the households earn less than 200% of the poverty guideline will be considered a Low Income Area. Further, those areas that are not Low Income Areas by this definition will not be considered part of a Food Desert; it can be assumed that higher income households can readily afford to travel to a store farther than one-half mile away.

**Small Grocery Store:** A smaller store without a variety of departments (deli, bakery, etc.) that offers at least one variety of milk and at least two (2) varieties of fresh fruits/vegetables.

**Supermarket:** Large store selling a variety of groceries including: raw meat, baked goods, at least eleven (11) varieties of both fresh fruits/vegetables, and three (3) varieties of milk (including low-fat). Also offers a variety of household goods and other services such as a pharmacy. Local examples include Giant Eagle, Heinen’s and Dave’s.

**Statistical Planning Area (SPA):** SPAs are geographic areas defined by the City of Cleveland Planning Commission in conjunction with community organizations and residents. The SPAs are a combination of contiguous census blocks within the City
and are defined by generally accepted neighborhood boundaries within each area. There are thirty-four (34) SPAs in the City of Cleveland. (http://neocando.case.edu/cando/index.jsp?tPage=geog)

**Structural Racism:** Racial bias across and within society. The cumulative and compounded effects of factors such as public policies, institutional practices, cultural representations, and other norms that often reinforce and perpetuate racial inequity.

**Transportation Access:** Access to affordable and reliable transportation is essential to addressing poverty, unemployment, and other equal opportunity goals such as access to healthy food, good schools, and health care services. (http://www.civilrights.org/transportation/)

**Urban or Suburban Sprawl:** The expansion of human populations away from central urban areas into areas with less population density; car-dependent communities.