

Neighborhood Food Retail in Philadelphia

SEPTEMBER 2019



CITY OF PHILADELPHIA
PHILADELPHIA DEPARTMENT OF PUBLIC HEALTH
DIVISION OF CHRONIC DISEASE AND INJURY PREVENTION



Table of Contents

	Executive Summary	3
<u>01</u>	Snapshot of Philadelphia Food Retailers	5
<u>02</u>	Disparities in Neighborhood Food Retail	6
<u>03</u>	Food Retail and Income	11
<u>04</u>	Travel to Food Retail	13
<u>05</u>	Access to Supermarkets	14
<u>06</u>	Changes to Food Retail Over Time	15
<u>07</u>	The Role of Restaurants	16
<u>08</u>	Food Retail by District	17
<u>09</u>	Recommendations and Initiatives	18
	Definitions	19
	Methods	19
	Acknowledgments	19
	Contact Info	19

Executive Summary

This report measures Philadelphia’s food retail environment. We recognize that most people shop for food at multiple stores, rather than just the store nearest them. However, differences in store offerings by neighborhood have a daily impact on both access to and marketing of healthy and unhealthy foods.

This report looks at the density and proximity of both “high-produce supply” stores (or stores with more healthier foods) and “low-produce supply” stores (generally speaking, stores that sell mostly unhealthy food options). This offers a way to capture the intensity of marketing and the broad availability of unhealthy products at the neighborhood level. Produce availability is emphasized given its accepted role in a healthy diet and clear definition. For this report, supermarkets were classified as high-produce supply, although we recognize that they also offer large amounts of unhealthy food.



KEY FINDINGS:

1

Across Philadelphia, low-produce supply stores vastly outnumber high-produce supply stores. This tips the balance towards foods high in calories, fat, sugar, or salt for everyone, regardless of income, race, or neighborhood.

2

Lower income neighborhoods have disproportionately high numbers of low-produce supply stores.

3

Proximity to supermarkets is only one part of improving diet quality.

NOTE: Definitions provided at the end of the report.

KEY FINDINGS:

1

Across Philadelphia, low-produce supply stores vastly outnumber high-produce supply stores. This tips the balance towards foods high in calories, fat, sugar, or salt for everyone, regardless of income, race, or neighborhood.

- Almost 1 million Philadelphians have more than 20 stores with low-produce supply within walking distance of their homes.
- More than 4 of 5 retail food stores in Philadelphia stock substantial amounts of unhealthy food and have low produce supply.
- Only 1 in 9 stores in the typical neighborhood offers significant amounts of produce and healthy food.

2

Lower income neighborhoods have disproportionately high numbers of low-produce supply stores.

- As census tract median income increases the number of high-produce supply stores increases and the number of low-produce supply stores decreases.
- Places with higher proportions of high-produce stores are overwhelmingly concentrated in Center City, University City, West Mount Airy, Chestnut Hill and Upper Roxborough.

3

Proximity to supermarkets is only one part of improving diet quality.

- On average, in areas without supermarkets nearby 72% of occupied housing units have a car.
- Produce markets and other non-supermarket high-produce supply stores fill some of the gap—almost 23% of Philadelphians do most of their grocery shopping at high-produce supply stores other than supermarkets.

BEYOND THIS REPORT



Engage with the maps and data in this report by visiting the [Food Environment Gallery](#). It contains a resource of interactive maps where you can search for an address, zoom, click on features, and even design your own map. Check out the Planning District Dashboard and Council District Dashboard, which provide metrics for a selected district. Send your comments and questions to GetHealthyPhilly@phila.gov.

Snapshot of Philadelphia Food Retailers

In this report we define stores as:

HIGH-PRODUCE SUPPLY:

- Supermarkets
- Big Box
- Produce Stores

Limited Access High-Produce Supply*

- Farmers Markets
- Mobile Produce
- Buying Clubs
- CSAs (community supported agriculture)

LOW-PRODUCE SUPPLY:

- Chain Convenience Stores
- Corner Stores
- Dollar Stores
- Gas Stations
- Newsstands
- Pharmacies

*Note: Limited Access High-Produce Supply Stores have restricted hours and availability and are weighted less in scoring.

**Methods are described in detail on page 19.

PHILADELPHIA RETAILERS

By Produce Supply

Only **19%** of all retail food stores in the city generally have a high-produce supply.

LOW PRODUCE **81%**

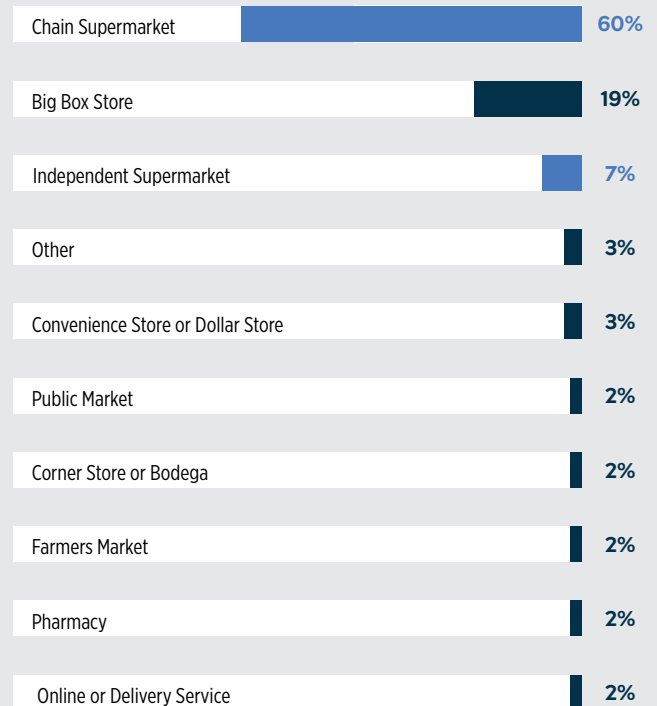
HIGH PRODUCE **19%**

89% of Philadelphians purchase most of their groceries from high-produce supply stores. This drops to 83% for individuals with incomes below \$25,000.

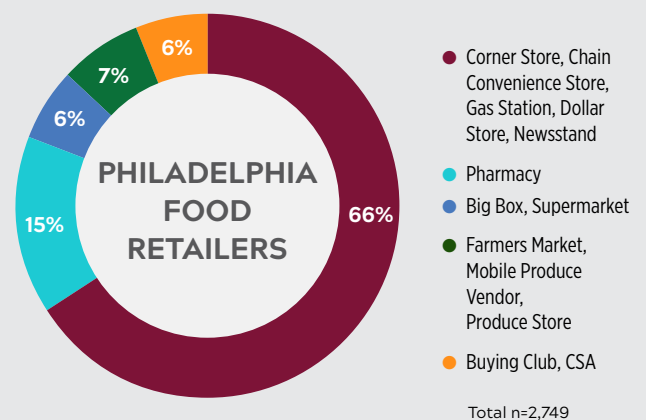
Where Philadelphians Usually Buy Most Groceries

67% of Philadelphians purchase most of their groceries from supermarkets.

This drops to 59% for individuals with incomes below \$25,000.



Source: Philadelphia Public Health Online Surveillance Survey. Notes: CSA = community supported agriculture; Big box stores = Walmart, Target, BJs, etc; Public markets = Reading Terminal and Italian Markets.

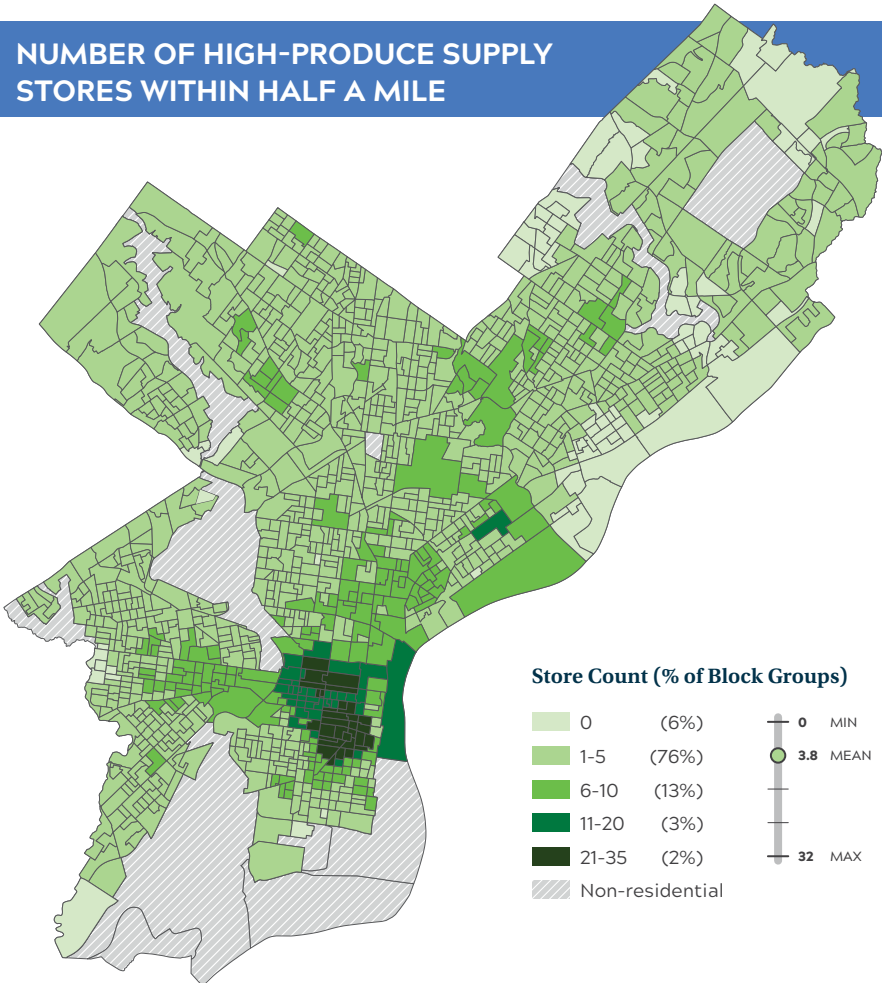


Disparities in Neighborhood Food Retail

Use the reference map below to orient you to subsequent maps illustrating neighborhood food retail disparities.



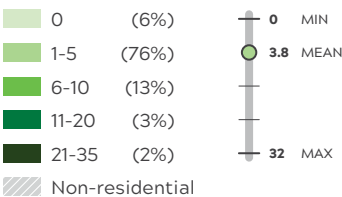
NUMBER OF HIGH-PRODUCE SUPPLY STORES WITHIN HALF A MILE



Of all block groups in Philadelphia, 6% have no high-produce supply stores in walking distance. Center City has the highest concentration of high-produce supply stores in walking distance.

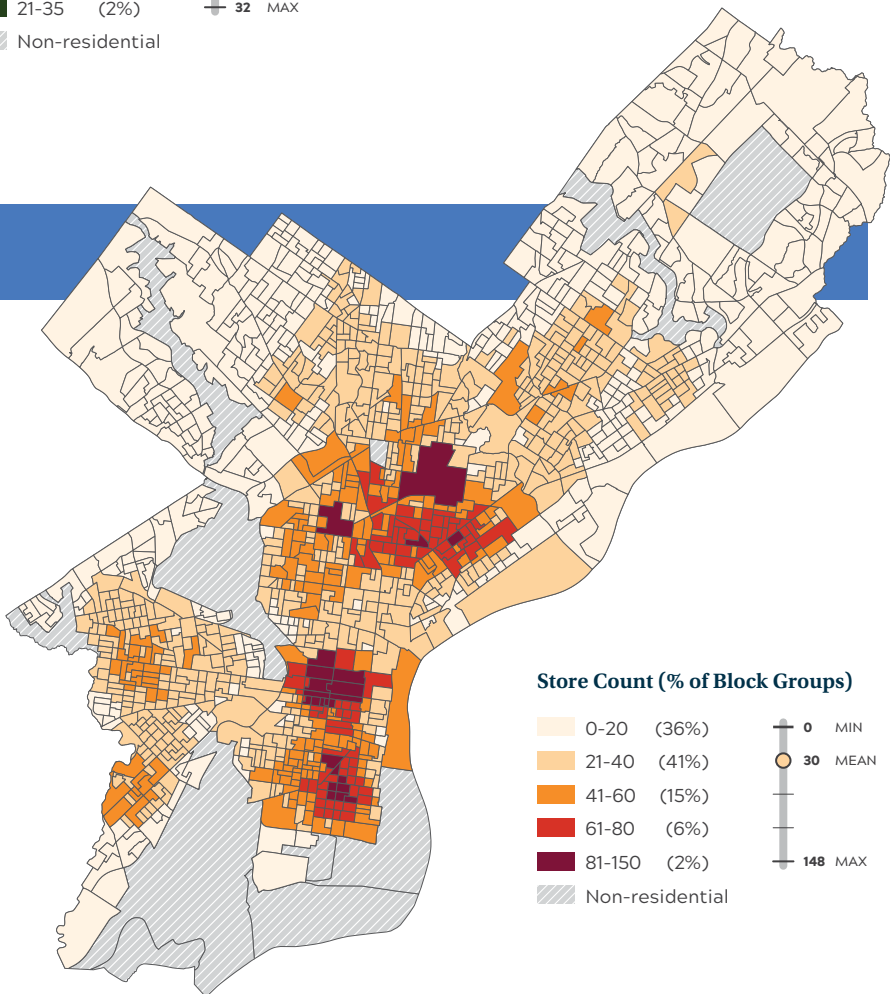
*Note: Limited-access high-produce supply stores were counted as ¼ due to restricted hours. Three block groups did not have any stores within a half mile.

Store Count (% of Block Groups)

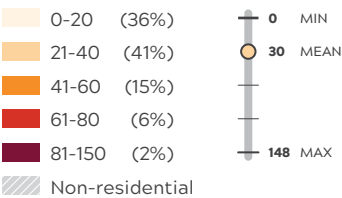


NUMBER OF LOW-PRODUCE SUPPLY STORES WITHIN HALF A MILE

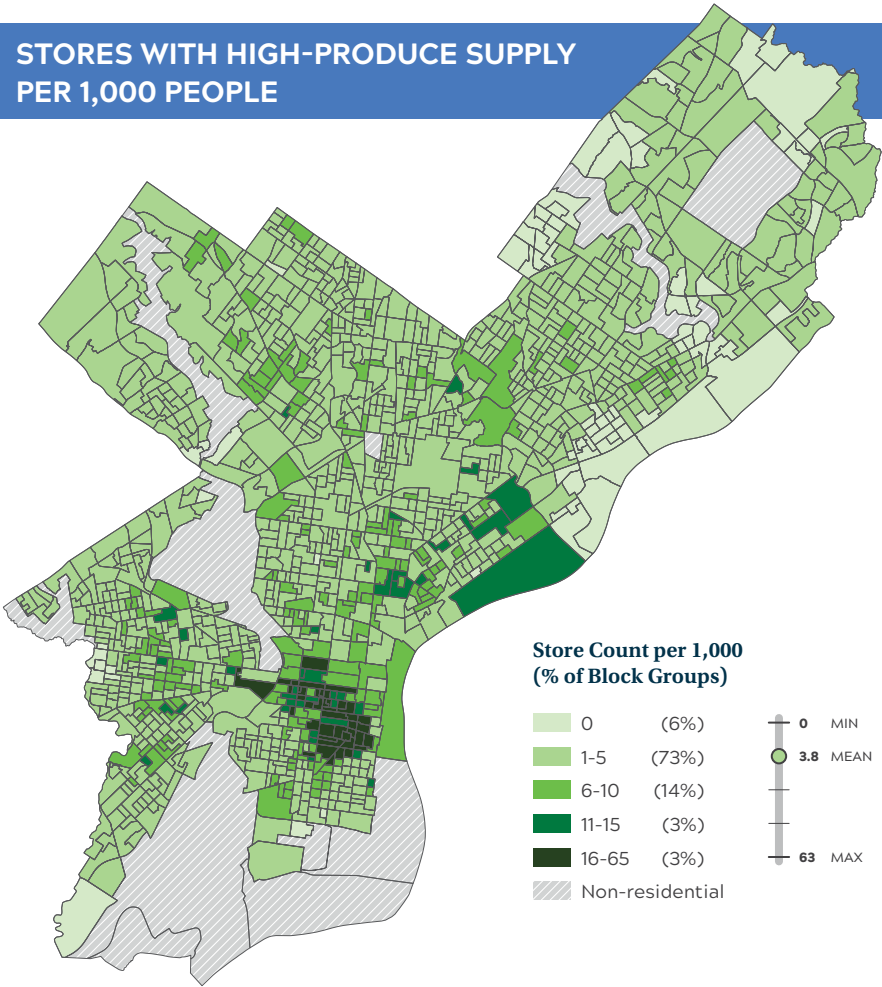
Philadelphians living in North Philly, South Philly, and Center City have a high number of low-produce supply stores near their homes. The maximum of low-produce supply stores is 4 times higher than the maximum of high-produce supply stores.



Store Count (% of Block Groups)



STORES WITH HIGH-PRODUCE SUPPLY PER 1,000 PEOPLE

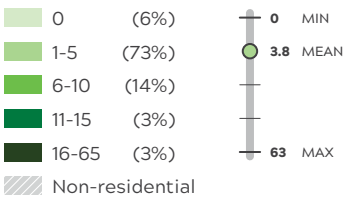


Per capita measures account for population density.

Darker green parts of the city have more high-produce supply stores per 1,000 people.

Limited access high-produce supply stores were counted as 1/2 due to restricted hours.

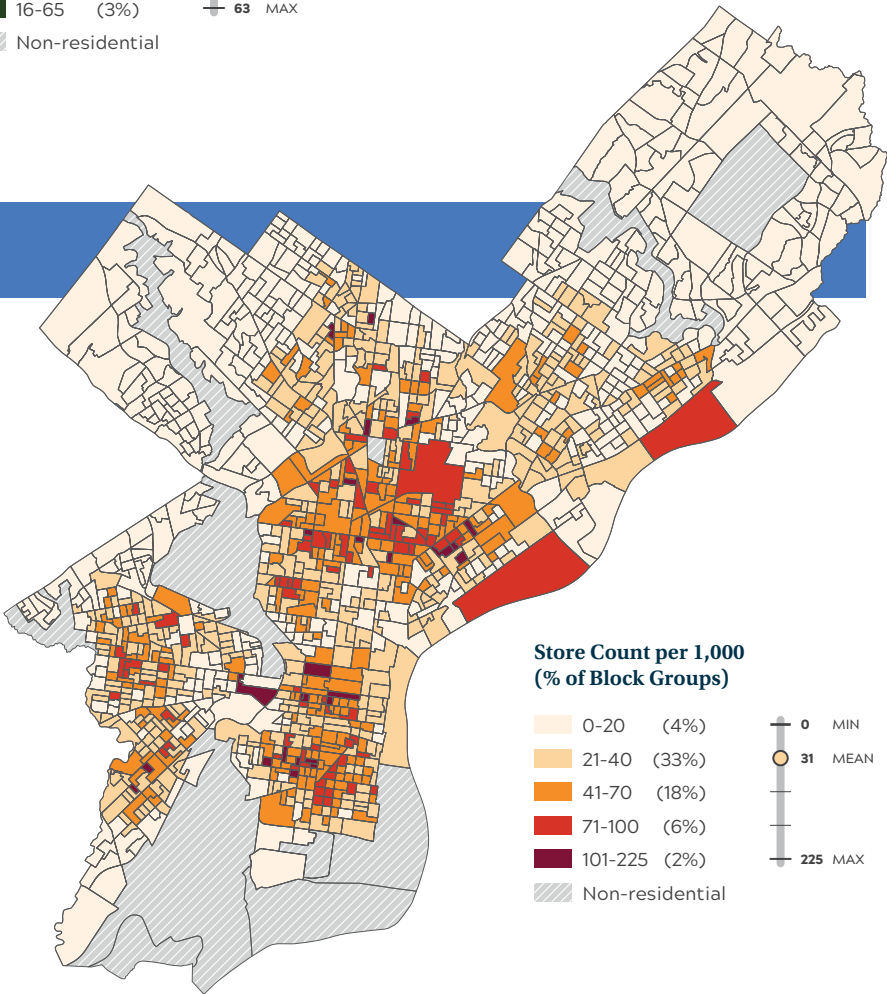
Store Count per 1,000 (% of Block Groups)



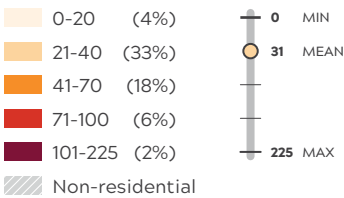
STORES WITH LOW-PRODUCE SUPPLY PER 1,000 PEOPLE

Darker red parts of the city have more low-produce supply stores per 1,000 residents.

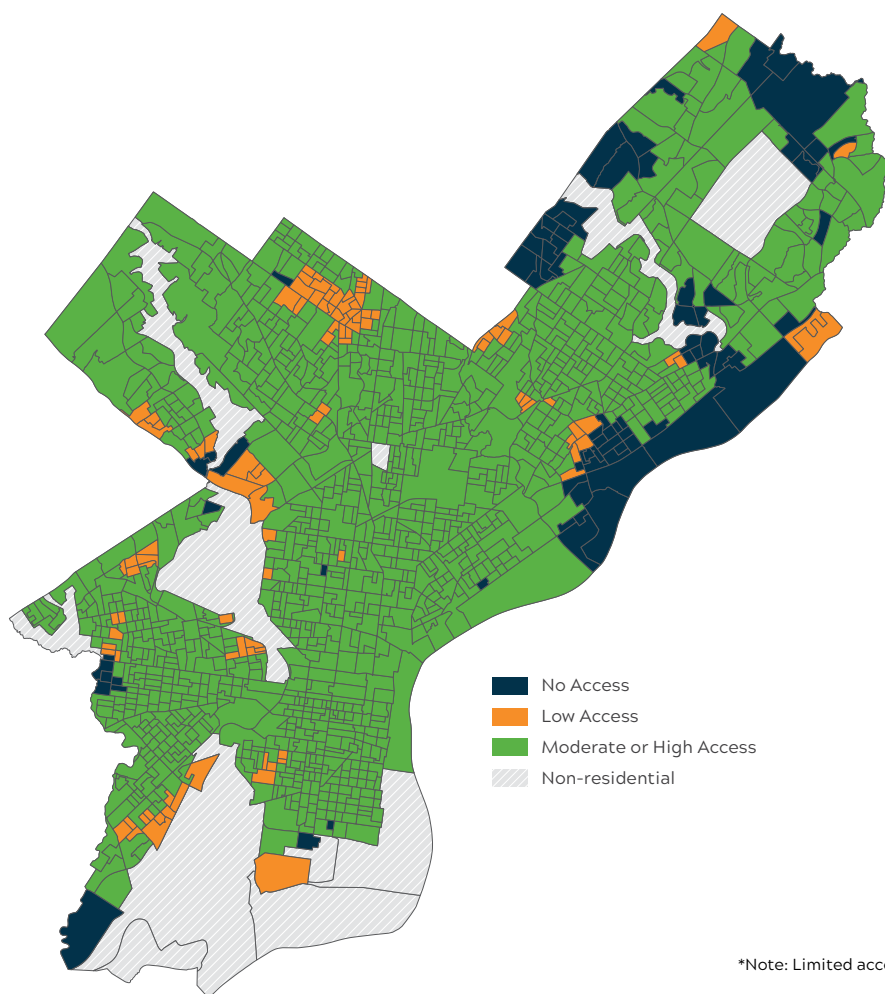
The maximum of low-produce supply stores per capita is 8 times higher than the maximum of high-produce supply stores per capita.



Store Count per 1,000 (% of Block Groups)



WALKABLE ACCESS TO STORES WITH HIGH-PRODUCE SUPPLY



NO ACCESS AREAS have 0 high-produce supply stores within walking distance.

LOW ACCESS AREAS have either:

- 1 big box store
- 1 produce store
- up to 4 limited access high-produce supply stores.

All remaining areas are **MODERATE OR HIGH ACCESS** and have either:

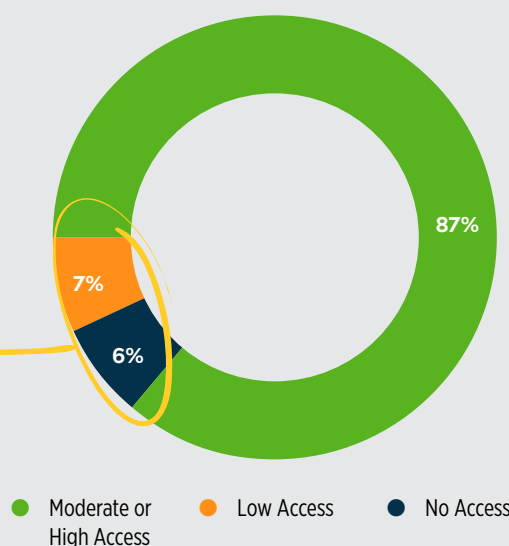
- 1 or more supermarkets within walking distance
- 2 or more high-produce supply stores. For example, an area with a big box store, and a produce store would have moderate to high access.
- 5 or more limited access high-produce supply stores
- A combination of high-produce and limited access high-produce stores > 1. For example, a big box store and a farmer's market.

*Note: Limited access high-produce supply stores were counted as ¼ due to restricted hours.

What Percentage of Philadelphians live in Areas with No, Low, Moderate, or High Access to Stores with a High-Produce Supply?

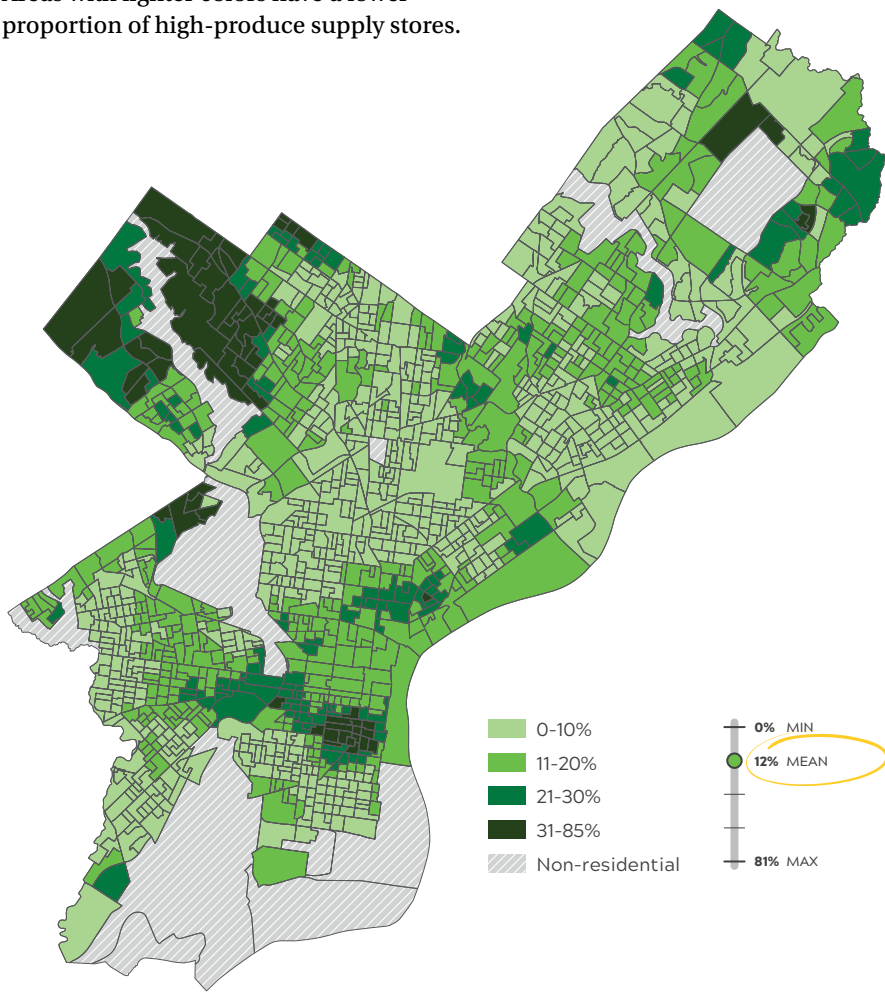
Approximately **13%** of Philadelphians have no or low access to stores with more high-produce and healthier foods, such as supermarkets and produce stores.

These estimates do not account for differences in healthy food quality and cost across high produce stores in the city.

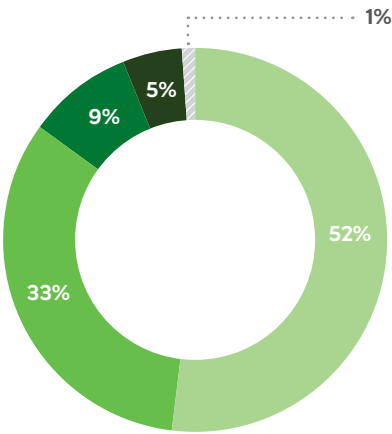


PERCENTAGE OF ALL STORES THAT ARE HIGH-PRODUCE SUPPLY STORES

Areas with lighter colors have a lower proportion of high-produce supply stores.



PERCENT OF BLOCK GROUPS IN EACH MAP CATEGORY



In the average Philadelphia neighborhood, only **12%** of stores nearby are high-produce. Philadelphia block groups have a range of 0-172 retail food stores within ½ mile.

Overall, most places in Philadelphia have a food environment that favors low-produce supply stores rather than high-produce supply stores, which means it is harder to find healthy foods and there is an overabundance of stores with unhealthy foods.

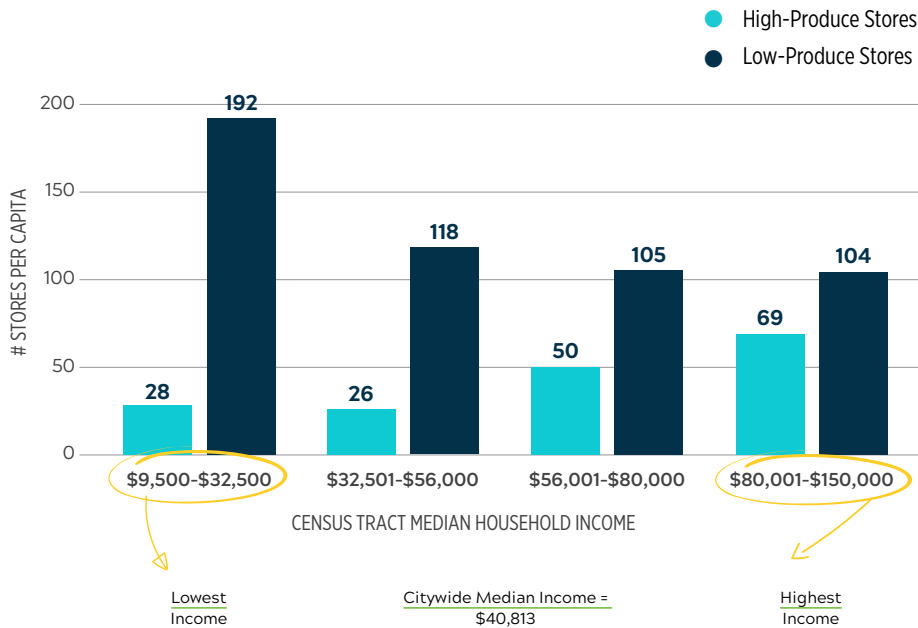
Over 85% of Philadelphia block groups (covering 1,331,195 or 85% of people) have 20% or less of their retail stores classified as ‘high-produce supply’

Places with higher proportions of high-produce supply stores are overwhelmingly concentrated in Center City, University City, Chestnut Hill, West Mount Airy, and Upper Roxborough.

The map shows that areas of the city with high rates of poverty also have a very high proportion of stores that primarily sell unhealthy food (low-produce supply stores), often representing more than 90% of stores in the neighborhood (ie, 0-10% high produce supply).

HIGH-PRODUCE SUPPLY AND LOW-PRODUCE SUPPLY STORES PER 100,000 PEOPLE BY CENSUS TRACT MEDIAN INCOME

by Census Tract Income



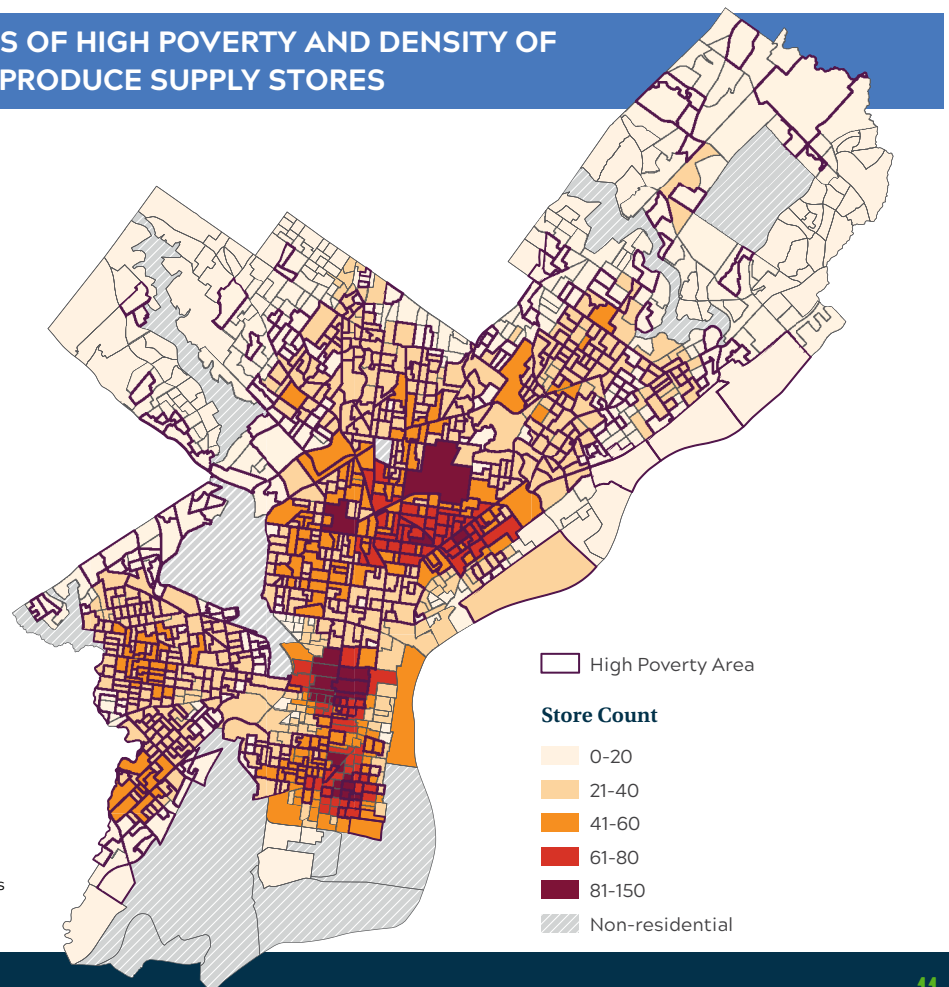
Places with the lowest median income have 28% fewer high-produce supply stores per capita compared to places with the highest median income.

Places with the lowest median income have 46% greater low-produce supply stores per capita compared to places with the highest median income.

In the lowest median income parts of the city, low-produce supply stores outnumber high-produce supply stores by almost 7 to 1. In the highest median income parts of the city, low-produce supply stores outnumber high-produce supply stores by only 1.5 to 1.



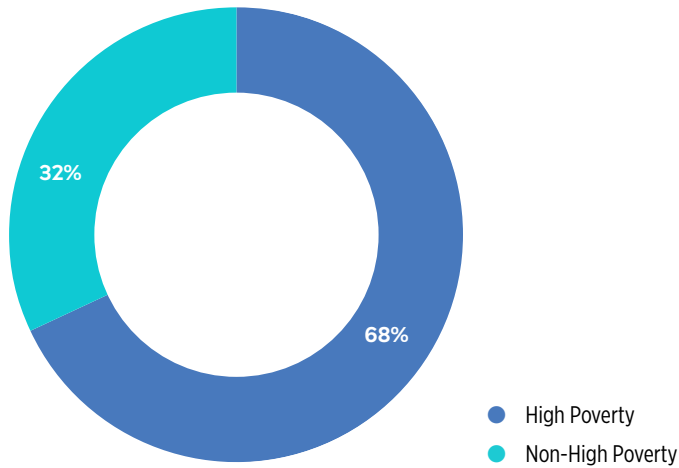
AREAS OF HIGH POVERTY AND DENSITY OF LOW-PRODUCE SUPPLY STORES



*Note: High poverty defined as 20% or more of the block group is below federal poverty level

PEOPLE LIVING IN AREAS WITH OVERABUNDANCE OF LOW-PRODUCE SUPPLY STORES

by Poverty Status



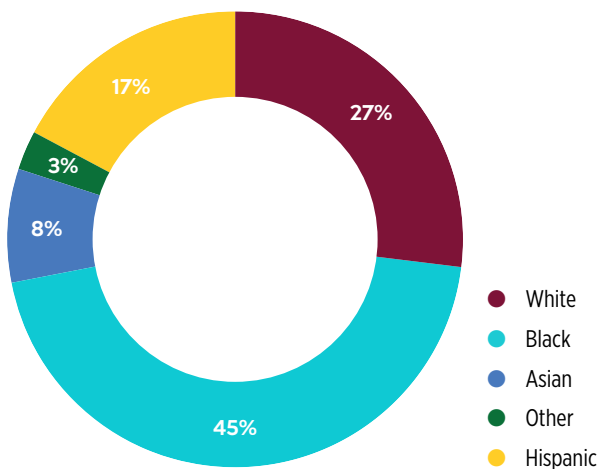
Areas with an overabundance of unhealthy food were defined as areas with more than 20 low-produce supply stores within walking distance.

63% of Philadelphians live in areas with an overabundance of unhealthy food.

People living in high poverty areas typically have a greater number of low-produce supply stores nearby.

68% of Philadelphians living in areas with an overabundance of unhealthy food are also living in high poverty areas.

by Race/Ethnicity



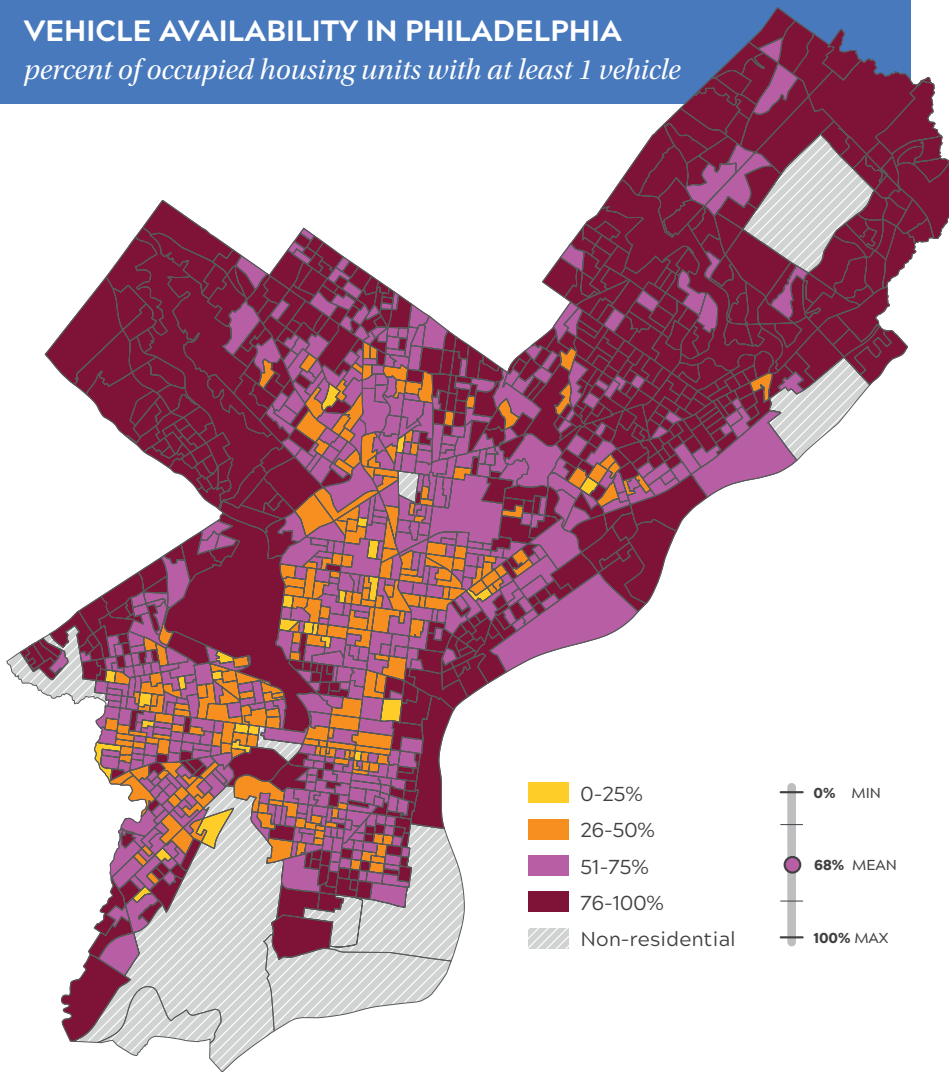
Over **980,000** Philadelphians live in areas with an overabundance of unhealthy food.

Most people living in areas with an overabundance of unhealthy food in Philadelphia are Black (45%), followed by White (27%), and Hispanic (17%).

Whites make up 35% of Philadelphia's population and 27% of the population living in areas with an overabundance of low-produce supply stores.

VEHICLE AVAILABILITY IN PHILADELPHIA

percent of occupied housing units with at least 1 vehicle



Darker purple areas on the map have higher car access. Lighter and orange/yellow areas have lower car access.

On average, in areas with no/low access to healthy foods (pg 9) 76% of housing units have a vehicle.

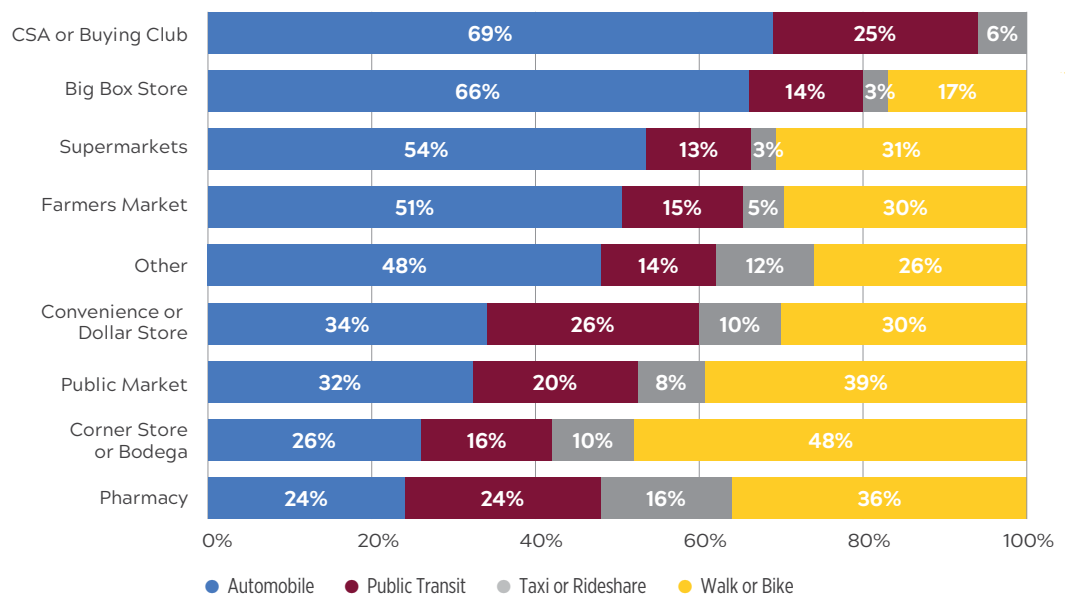
The majority of Philadelphians are using automobiles to buy most of their groceries from supermarkets.

Almost **1 in 3** Philadelphians are walking or biking to the supermarket.

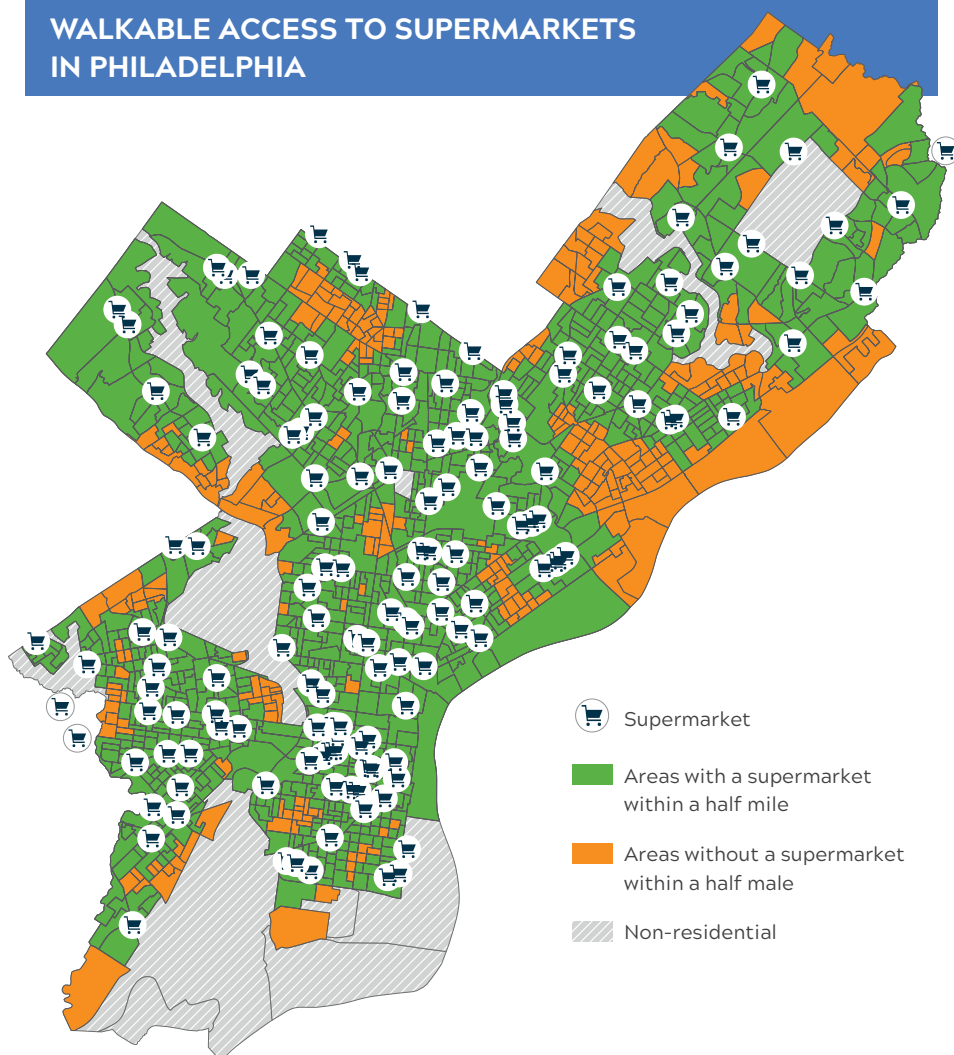
How do Philadelphians Usually Travel to Buy Food?

Source: Philadelphia Public Health Online Surveillance Survey.

Notes: CSA = community supported agriculture; Big box stores = Walmart, Target, BJ's, etc; Public markets = Reading Terminal and Italian Markets.



WALKABLE ACCESS TO SUPERMARKETS IN PHILADELPHIA



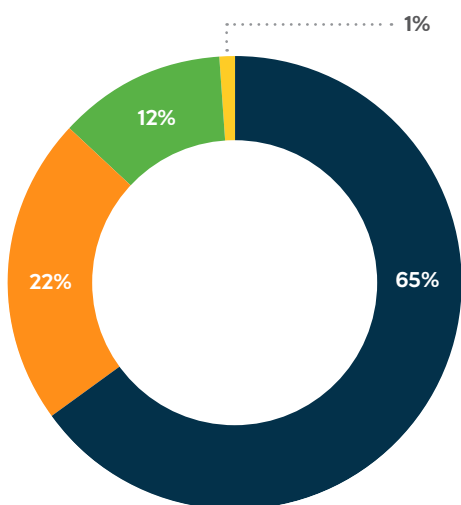
Areas in orange do not have a supermarket within a half mile.

On average, in areas without supermarkets nearby (pg 9) 72% of occupied housing units have a vehicle.

There are 149 supermarkets in Philadelphia and 54% are located in high poverty areas.

The number of people in the areas without access to a supermarket within ½ mile is 307,528, or **20%** of the population.

CITYWIDE SUPERMARKET TYPES



High poverty areas have a similar proportion of conventional markets (67%), but more limited assortment markets (26%) and fewer natural/gourmet foods markets (6%).

- Conventional
- Limited Assortment
- Natural/Gourmet Foods
- Warehouse

Supermarket Types

CONVENTIONAL

Traditional full-line, self-service grocery stores such as Acme or Fresh Grocer.

LIMITED ASSORTMENT

Like Aldi or Save-A-Lot, which have a limited selection of items, mainly due to a smaller size and fewer produce and non-food items.

NATURAL/GOURMET FOODS MARKETS

Such as Trader Joe's and Whole Foods, offer natural, organic, or gourmet foods and products.

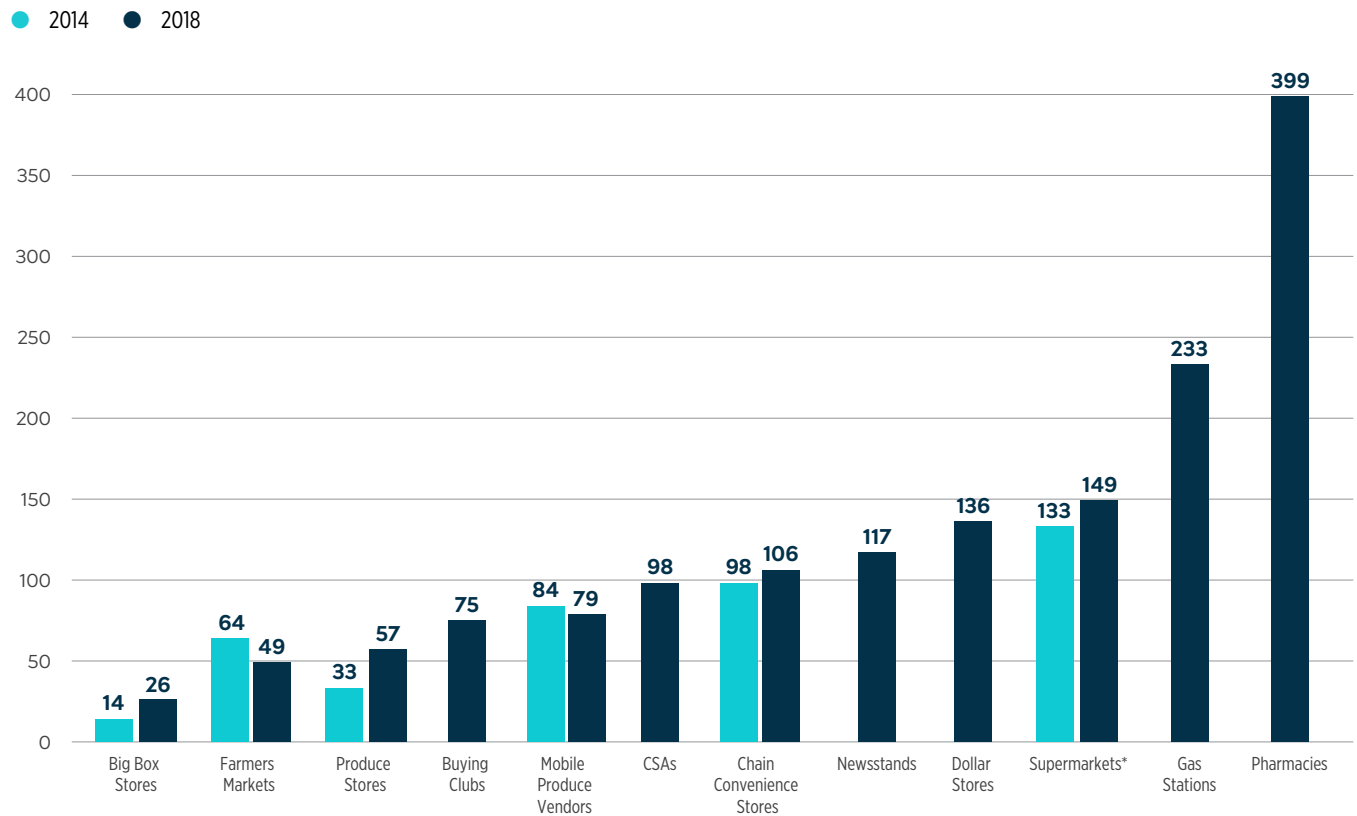
WAREHOUSE

Limited service stores with no frills, price appeal, bulk food, and original shipping cartons.

Changes to Food Retail Over Time

NUMBER OF FOOD RETAILERS BY TYPE

Changes from 2014 to 2018

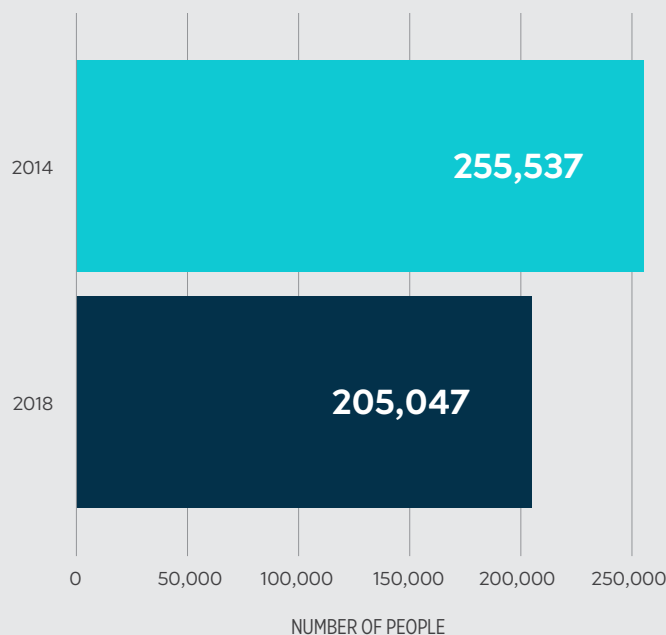


*Supermarkets counts include supermarkets within a half mile of the Philadelphia city limits.
Data for some store types was not collected in 2014.

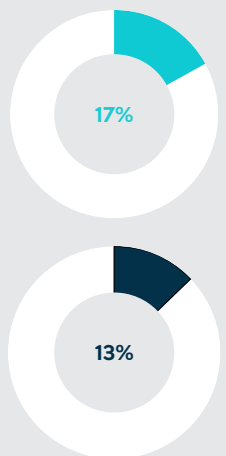
PEOPLE IN LOW-TO-NO ACCESS AREAS

Changes from 2014 to 2018

● 2014 ● 2018



PERCENT OF POPULATION

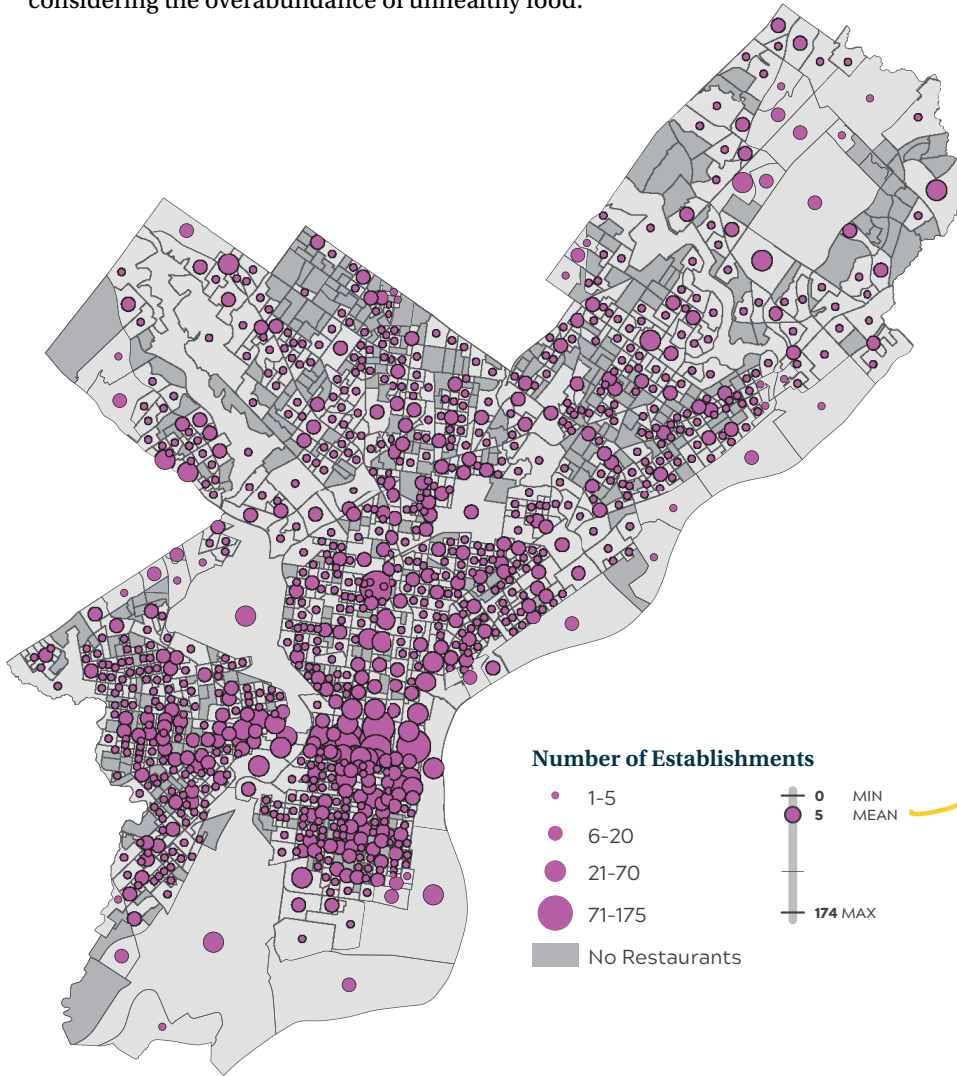


Low-to-no access is defined as shown on pg 9.

*The number of Buying Clubs and CSAs in 2014 were not available and therefore not counted in the access analysis. This was expected to have limited impact.

NUMBER OF RESTAURANTS, BARS, AND FOOD TRUCKS PER BLOCK GROUP IN PHILADELPHIA

As American diets increasingly rely on restaurants, the healthfulness of food in restaurants deserves more attention. This report was unable to classify the healthfulness of restaurant food in our city. Restaurants with predominantly unhealthy food, such as fast food restaurants, are typically included when considering the overabundance of unhealthy food.



There are over 6,000 places to dine in Philadelphia, emphasizing their importance to the way we eat and the need to have healthy options while eating out.

Center City is densely packed with restaurants (50% of Center City block groups have more than 10 restaurants), as is University City (50% of University City block groups have more than 14 restaurants).

On average, there are **5** restaurants located within a block group.



Food Retail by District

YOUR PLANNING DISTRICT ACCESS

Planning District	# Stores with High-produce Supply	# Stores with Low-produce Supply	% High-produce Supply Stores	# of People in Low-to-No Access Areas	# of People in Overabundance of Unhealthy Food Areas
Central	116	235	33.0%	0	110,395
Central Northeast	10	78	11.4%	13,088	31,235
Lower Far Northeast	11	48	18.6%	15,196	0
Lower North	36	184	16.4%	3,434	86,510
Lower Northeast	27	149	15.3%	20,147	82,533
Lower Northwest	19	35	35.2%	14,034	0
Lower South	1	5	16.7%	2,997	0
Lower Southwest	8	73	9.9%	11,617	22,638
North	37	326	10.2%	1,891	130,198
North Delaware	9	86	9.5%	31,017	37,526
River Wards	27	122	18.1%	6,656	51,343
South	67	256	20.7%	5,321	134,294
University/Southwest	46	93	33.1%	1,231	62,569
Upper Far Northeast	9	54	14.3%	16,460	5,039
Upper North	21	181	10.4%	27,990	98,779
Upper Northwest	37	80	31.6%	6,328	22,281
West	28	166	14.4%	19,761	104,161
West Park	15	45	25.0%	7,879	4,921

YOUR COUNCIL DISTRICT ACCESS

Council District	# Stores with High-produce Supply	# Stores with Low-produce Supply	% High-produce Supply Stores	# of People in Low-to-No Access Areas	# of People in Overabundance of Unhealthy Food Areas
1	109	336	24.5%	789	152,194
2	52	225	18.7%	17,538	121,623
3	66	192	25.6%	17,012	120,425
4	45	164	21.5%	30,181	56,011
5	91	298	23.4%	3,434	130,431
6	19	162	10.5%	43,444	58,475
7	34	332	9.3%	9,746	153,668
8	51	205	19.9%	8,175	86,109
9	33	176	15.8%	35,749	90,469
10	24	126	16.0%	38,979	15,017

CHECK OUT THE ONLINE [FOOD ENVIRONMENT GALLERY](#) TO EXPLORE BY DISTRICT

Recommendations and Initiatives

Philadelphia's retail food environment contains an overabundance of unhealthy foods, a citywide problem, that is even more extreme in higher-poverty areas. This unhealthy food environment contributes to the city's tremendously high rates of diabetes, premature heart disease, and cancer. As part of Get Healthy Philly's work to improve health justice in the city, we need to pursue strategies to ensure that unhealthy foods no longer crowd out healthy choices.

WHAT THE CITY IS DOING:

Get Healthy Philly is

- Investing in neighborhood entrepreneurs interested in opening healthy food businesses (in partnership with the Commerce Department) and in community-driven food justice projects (with the Reinvestment Fund).
- Exploring ways to better measure store environments to assess both healthy and unhealthy food availability.
- Finalizing an assessment of the local food economy to further identify "Good Food" opportunities that support health, fair labor, sustainable sourcing and local economies.
- Increasing the market supply of healthy food by partnering with anchor institutions and local food manufacturers.
- Promoting healthy food choices through partnerships with the School District of Philadelphia, the Mayor's Office of Education, PHLpreK, Philadelphia Parks and Recreation, and through social and mass media strategies.

The City is launching an Urban Agriculture Strategic Plan, led by a new Urban Agriculture Director, that will help the city measure and support urban agriculture initiatives and assets.

WHAT COMMUNITY GROUPS AND INDIVIDUALS CAN DO:

- Learn more about the food environment of your neighborhood using the [online map and dashboard](#).
- If you have a produce store or healthy food business in your neighborhood, shop local.
- Change your vocabulary- talk to friends, family, and local stores about the overabundance of unhealthy foods around you.
- Ask food retailers in your neighborhood to reject food companies' unhealthy food marketing in their stores and to support the health of the community by adding more healthy options.
- Contact Get Healthy Philly (gethealthyphilly@phila.gov) to get connected to free training on healthy food buying and cooking or to plan a listening session on your neighborhood's food environment.
- If you have an idea for a healthy food business for your neighborhood, reach out to the Department of Commerce for support and advice. You can reach a Business Services Manager at 215-683-2100 or Business@Phila.gov

NEXT STEPS

- Plans for our next food environment report include going beyond geographical food access, such as considering quality and cost.
- We will work to identify more detailed data on individual stores, allowing us to more accurately categorize stores based on the healthfulness of their inventory.
- Identify new, more-nuanced terms to reflect the reality of food disparities and the untapped assets of neighborhoods. The term "food desert" is popular shorthand for areas without grocery stores or enough healthy food. However, it is criticized for denying that 1) deserts are living landscapes, 2) often food is available - it is just high in sugar, salt, or unhealthy fats, and 3) food disparities are not naturally occurring but created through social and structural actions. The term "food swamp" is used to mean an area with too much unhealthy food, but has many of the same limitations as "food desert."

DEFINITIONS

AREAS = Block groups comprised of groups of city blocks as determined by the Census. Block groups in Philadelphia are typically about 0.1 square miles and have a population of almost 1,200 people on average.

HIGH POVERTY = At least 20% of residents live at or below the federal poverty level.

HIGH-PRODUCE SUPPLY STORES = Stores that generally offer a larger amount of healthier foods, particularly produce. Stores included were: supermarkets, big box stores, produce stores, farmers markets, mobile produce, buying clubs, and CSAs (community supported agriculture). Supermarkets (8) and big box stores (3) within a half mile of Philadelphia were included to account for border-crossing. This is reflected in all references to high-produce supply stores and supermarkets.

LOW-PRODUCE SUPPLY STORES = Stores that generally offer a low amount of healthy food choices and often have a higher amount of unhealthy food choices, like sugary beverages and sugary and salty snacks. Stores included were: chain convenience stores, corner stores, dollar stores, gas stations, newsstands, and pharmacies.

WALKING DISTANCE = Within ½ mile walking along the street

OVERABUNDANCE OF UNHEALTHY FOOD = Areas with more than 20 low-produce supply stores within walking distance.

METHODS

- 1) Several data sources were aggregated including data from Nielsen-Trade Dimensions TD Linx Data, the USDA's SNAP list, the PTRD, and the EHS database. Duplicate records were removed to create a complete list of Philadelphia food retailers.
- 2) Stores were categorized into high-produce supply and low-produce supply and counted (i.e., weighted) as 1 or 0.25 based on availability and store hours. Additional verification of each list was conducted by cross-checking against all other store types and associated category (e.g., stores with high-produce or stores with low-produce) to ensure proper classification of stores.
- 3) A half mile was established as a reasonable distance to walk to a store within one's neighborhood based on other studies.
- 4) The total number of high-produce supply stores and low-produce supply stores within walking distance were calculated for each block group using GIS.
- 5) The number of high-produce supply stores and low-produce supply stores per 1,000 people were calculated for each block group.
- 6) Block groups were categorized into either no, low, or moderate or high walkable access to stores with a high-produce supply. Categories were based on the accessibility of store types and density.

Please see the [technical appendix](#) for the full methodology, data sources and definitions, limitations, and additional notes.

ACKNOWLEDGMENTS

REPORT AUTHORS:

Amory Hillengas, MUSA

Cheryl Bettigole, MD, MPH

Amanda Wagner, MCRP, MGA

Hannah Lawman, PhD

The Philadelphia Department of Public Health would like to acknowledge a number of individuals and organizations for contributing to this report: **Jason Block, MD, MPH, Rickie Brawer, PhD, MPH, Joel Gittelsohn, PhD, Kevin Henry, PhD, Shiriki Kumanyika, PhD, MPH, Bill McKinney, PhD, Michael Norton, PhD, the Reinvestment Fund and the Philadelphia City Planning Commission.**

The [USDA](#) considers ½ mile walking distance to be “high access” and ⅓ to 1 mile to be “medium access” while the [Food Trust](#) considers “low access” to be more than 1 mile from the nearest supermarket. We have chosen to use the most conservative of these definitions to avoid overestimating access and to emphasize walkable access.

Send your comments and questions to GetHealthyPhilly@phila.gov.