Mapping the Food Environment in Syracuse, New York 2017

June 19, 2017



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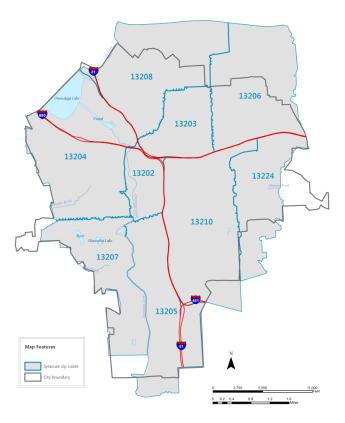
An Assessment of the Local Food Environment in Syracuse, New York

Maintaining healthy eating habits can decrease the incidence of chronic conditions like obesity and diabetes, which are some of the main health challenges in Onondaga County. While healthy eating is an individual behavior, choices are influenced by a number of factors, one of which is the local food environment. As defined by the Centers for Disease Control and Prevention (CDC), the food environment is "the physical presence of food that affects a person's diet, a person's proximity to food store locations, the distribution of food stores, food service, and any physical entity by which food may be obtained, or a connected system that allows access to food." This report seeks to examine the food environment for each zip code in the City of Syracuse (Figure 1) in order to provide a framework to support healthy food initiatives in the community. Zip codes were included if they fell primarily within the City of Syracuse boundary.

To create the profiles, data were pulled for each zip code from existing sources, including the American Community Survey and the New York Statewide Planning and Research Cooperative System (SPARCS). Indicators were selected based on availability and relevance to the local socioeconomic and food environment. The full data table can be seen in Appendix A. A geospatial analysis included census tract level data for obesity rates and food desert status, layered with point data noting the locations of food sources. Maps also include the location of Syracuse City School District school buildings, to show the types of food establishments that are easily accessible to school aged children. Geocoding and map development was performed according to standards adhered to by the Syracuse - Onondaga County Planning Agency.

For the purposes of this report, food deserts are defined as census tracts where the poverty rate is >20%, and where 33% or more of residents are more than 0.5 miles from the nearest supermarket. Other food stores include convenience stores, dollar stores, food cooperatives, gas stations, international food stores, small grocery stores, specialty food stores, and pharmacies. To provide a more

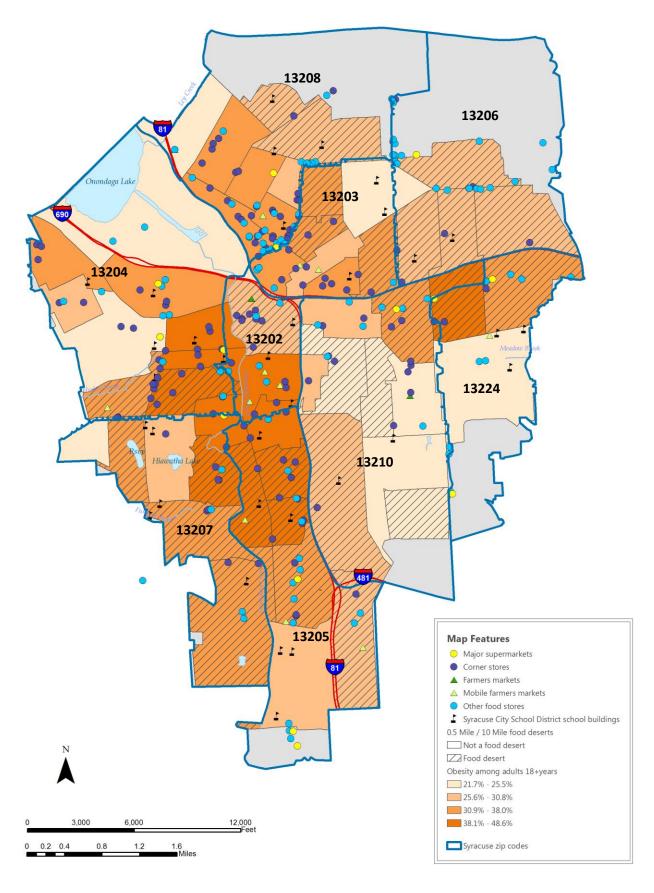
Figure 1. City of Syracuse Zip Codes



comprehensive look at access to healthy foods in high risk areas, results of several recent surveys were also reviewed. Over the past year, OCHD has developed and implemented surveys in zip codes 13202, 13205 and 13207 for various projects. A recent community engagement survey sent to residents in all City zip codes also asked about access to healthy foods. Results are noted below by zip code as appropriate.

¹ Centers for Disease Control and Prevention. Healthy Places: General Food Environment Resources. 2014. https://www.cdc.gov/healthyplaces/healthtopics/healthyfood/general.htm. Accessed 5/18/17.

Syracuse Food Environment with Zip Code Boundaries

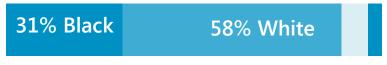


Food Environment Profiles

SYRACUSE

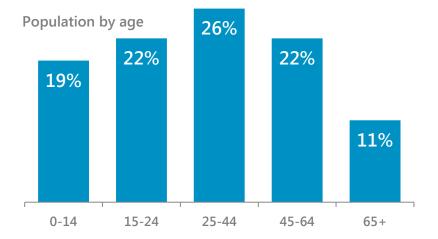
144,564 Residents

Population by race*



7% Asian 4% Other

8% Hispanic ethnicity



\$31,881

Median household income

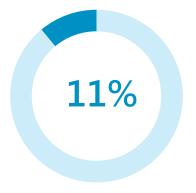
35% Living in poverty

50%

Children living in poverty

29%
Households with no vehicle available

31% Households with SNAP benefits†







% of population 16+years living with a disability

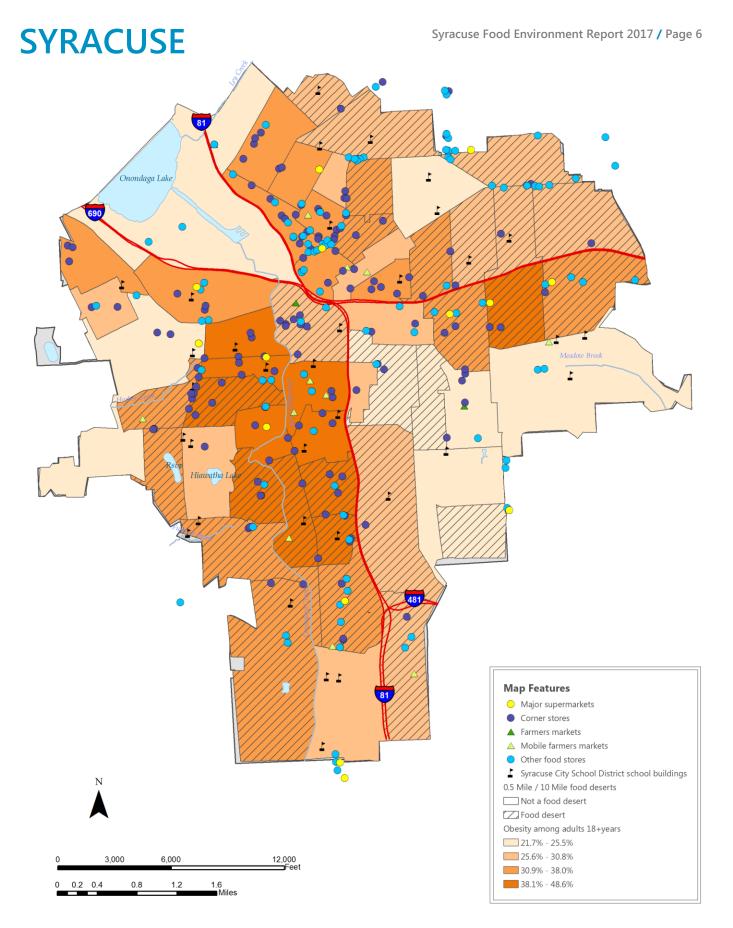
% of population born outside the United States

% of adults with less than a high school degree

Source: U. S. Census Bureau, American Community Survey, 2011-2015, 5 year estimates.

*Among individuals reporting one race.

†SNAP is an abbreviation for Supplemental Nutrition Assistance Program.



Map Sources: Food desert census tracts: USDA, Food Access Research Atlas, 2015. Adult obesity rate by census tract: CDC 500 cities project. Major supermarkets, corner stores, other food stores: multiple sources including, USDA, SNAP retailer locator, 2017; USDA, Food and Nutrition Service, 2016; OCHD Bureau of Surveillance and Statistics. Farmers markets, mobile farmers markets, Syracuse City School District buildings: OCHD Bureau of Health Promotion.

<u>Map Notes</u>: Food deserts and obesity rates are represented only for census tracts that primarily comprise the City of Syracuse. Grey areas represent census tracts that do not fall primarily within Syracuse.

5,878 Residents

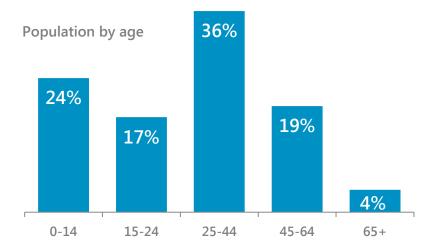
Population by race*



8% Asian 5% Other

10.7%

Hispanic ethnicity



\$15,565

Median household income

56%

Living in poverty

68%

Children living in poverty

50%

Households with no vehicle available

48%

Households with SNAP benefits†



% of population born outside the United States

17%



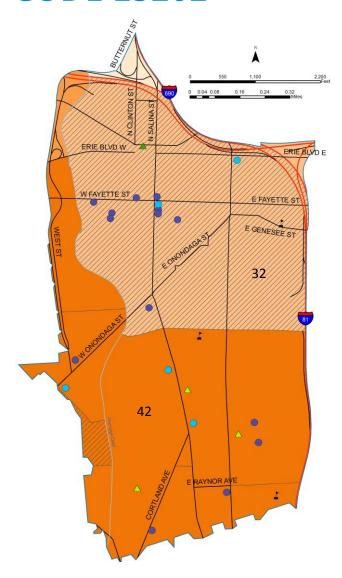
% of population 16+years living with a disability

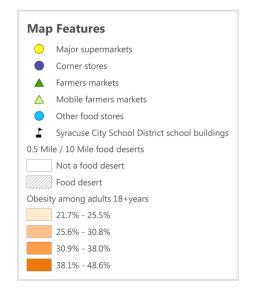
% of adults with less than a high school degree

Source: U. S. Census Bureau, American Community Survey, 2011-2015, 5 year estimates *Among individuals reporting one race.

[†]SNAP is an abbreviation for Supplemental Nutrition Assistance Program

†Data not available





14

SNAP retailers

22

Fast food restaurants

38

Full-service restaurants

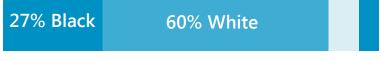
	13202	Best-performing zip code	Worst-performing zip code
Diabetes	48.9	19.3	53.1
hospitalization	(Ranks 7 th)	(13224)	(13205)
Hypertension hospitalization	†	2.4	9.8
		(13206)	(13205)
Heart failure	80.1	26.0	80.1
hospitalization	(Ranks 9 th)	(13206)	(13202)

Sources: SNAP retailers: USDA, SNAP retailer locator, 2017. Fast food restaurants and full-service restaurants: US Census Bureau, County Business Patterns, 2015. Health Outcomes: New York Statewide Planning and Research Cooperative System, 2012-2014.

Map Sources: Food desert census tracts: USDA, Food Access Research Atlas, 2015. Adult obesity rate by census tract: CDC 500 cities project, 2015. Major supermarkets, corner stores, other food stores: multiple sources including, USDA, SNAP retailer locator, 2017; USDA, Food and Nutrition Service, 2016; OCHD Bureau of Surveillance and Statistics. Farmers markets, mobile farmers markets, Syracuse City School District buildings: OCHD Bureau of Health Promotion.

16,406 Residents

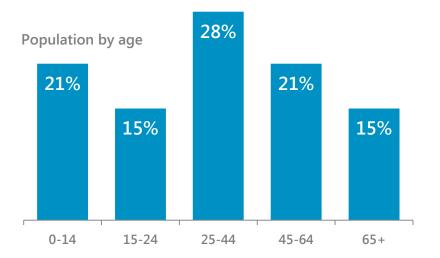
Population by race*



8% Asian 5% Other

9%

Hispanic ethnicity



\$30,731

Median household income

36%

Living in poverty

58%

Children living in poverty

37%

Households with no vehicle available

33%

Households with SNAP benefits†





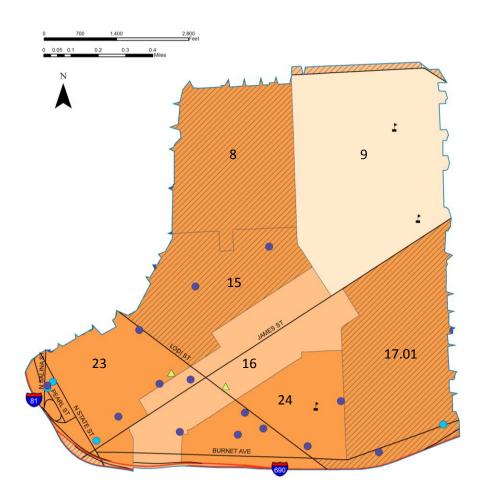


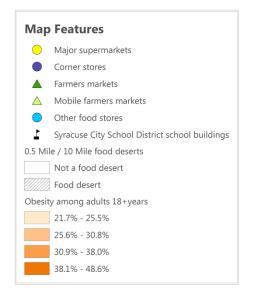
% of population 16+years living with a disability

% of population born outside the United States

% of adults with less than a high school degree

⁺SNAP is an abbreviation for Supplemental Nutrition Assistance Program





16
SNAP retailers

5

Fast food restaurants

9

Full-service restaurants

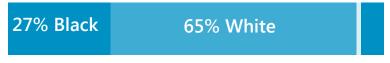
	13203	Best-performing zip code	Worst-performing zip code
Diabetes	36.4	19.3	53.1
hospitalization	(Ranks 4 th)	(13224)	(13205)
Hypertension	7.2	2.4	9.8
hospitalization	(Ranks 4 th)	(13206)	(13205)
Heart failure	43.9	26.0	80.1
hospitalization	(Ranks 4 th)	(13206)	(13202)

Sources: SNAP retailers: USDA, SNAP retailer locator, 2017. Fast food restaurants and full-service restaurants: US Census Bureau, County Business Patterns, 2015. Health Outcomes: New York Statewide Planning and Research Cooperative System, 2012-2014.

Map Sources: Food desert census tracts: USDA, Food Access Research Atlas, 2015. Adult obesity rate by census tract: CDC 500 cities project, 2015. Major supermarkets, corner stores, other food stores: multiple sources including, USDA, SNAP retailer locator, 2017; USDA, Food and Nutrition Service, 2016; OCHD Bureau of Surveillance and Statistics. Farmers markets, mobile farmers markets, Syracuse City School District buildings: OCHD Bureau of Health Promotion.

19,896 Residents

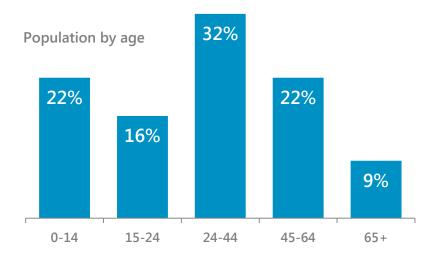
Population by race*



1% Asian 6% Other

16%

Hispanic ethnicity



\$28,220

Median household income

40%

Living in poverty

58%

Children living in poverty

34%

Households with no vehicle available

40%

Households with SNAP benefits†





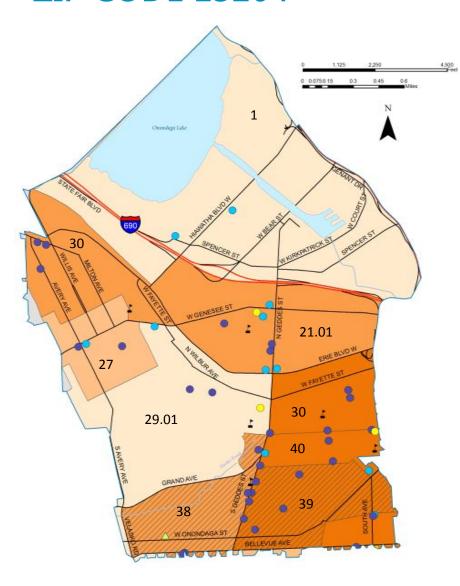


% of population 16+years living with a disability

% of population born outside the United States

% of adults with less than a high school degree

[†]SNAP is an abbreviation for Supplemental Nutrition Assistance Program



	Major supermarkets
	Corner stores
	Farmers markets
	Mobile farmers markets
	Other food stores
1	Syracuse City School District school buildings
0.5 M	ile / 10 Mile food deserts
	Not a food desert
	Food desert
Obesi	ty among adults 18+years
	21.7% - 25.5%
	25.6% - 30.8%
	30.9% - 38.0%
	38.1% - 48.6%

43

SNAP retailers

21

Fast food restaurants

22

Full-service restaurants

	13204	Best-performing zip code	Worst-performing zip code
Diabetes	51.1	19.3	53.1
hospitalization	(Ranks 8 th)	(13224)	(13205)
Hypertension	8.7	2.4	9.8
hospitalization	(Ranks 6 th)	(13206)	(13205)
Heart failure	70.9	26.0	80.1
hospitalization	(Ranks 8 th)	(13206)	(13202)

Sources: SNAP retailers: USDA, SNAP retailer locator, 2017. Fast food restaurants and full-service restaurants: US Census Bureau, County Business Patterns, 2015. Health Outcomes: New York Statewide Planning and Research Cooperative System, 2012-2014.

Map Sources: Food desert census tracts: USDA, Food Access Research Atlas, 2015. Adult obesity rate by census tract: CDC 500 cities project, 2015. Major supermarkets, corner stores, other food stores: multiple sources including, USDA, SNAP retailer locator, 2017; USDA, Food and Nutrition Service, 2016; OCHD Bureau of Surveillance and Statistics. Farmers markets, mobile farmers markets, Syracuse City School District buildings: OCHD Bureau of Health Promotion.

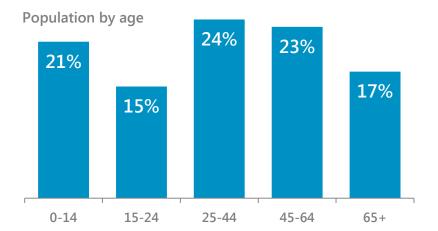
18,729 Residents

Population by race*



3% Asian 3% Other

7% Hispanic ethnicity



\$30,284

Median household income

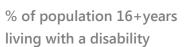
34% Living in poverty

50% Children living in poverty

32%
Households with no vehicle available

36% Households with SNAP benefits†







% of population born outside the United States

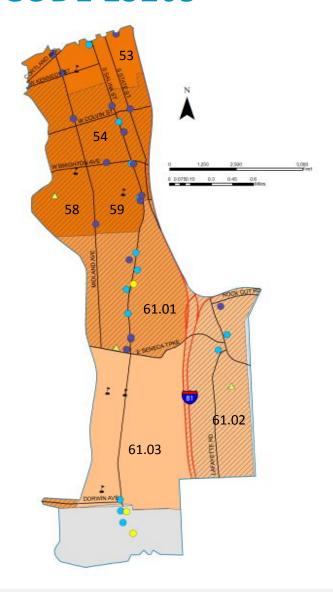


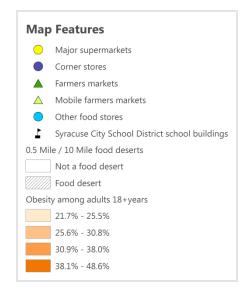
% of adults with less than a high school degree

Source: U. S. Census Bureau, American Community Survey, 2011-2015, 5 year estimates *Among individuals reporting one race.

[†]SNAP is an abbreviation for Supplemental Nutrition Assistance Program

Rates are per 10,000 population 18+years





31
SNAP retailers

10
Fast food restaurants

0
Full-service restaurants

	13205	Best-performing zip code	Worst-performing zip code
Diabetes hospitalization	53.1 (Ranks 9 th)	19.3 (13224)	53.1 (13205)
Hypertension hospitalization	9.8 (Ranks 7 th)	2.4 (13206)	9.8 (13205)
Heart failure hospitalization	63.8 (Ranks 7 th)	26.0 (13206)	80.1 (13202)

Sources: SNAP retailers: USDA, SNAP retailer locator, 2017. Fast food restaurants and full-service restaurants: US Census Bureau, County Business Patterns, 2015. Health Outcomes: New York Statewide Planning and Research Cooperative System, 2012-2014.

Map Sources: Food desert census tracts: USDA, Food Access Research Atlas, 2015. Adult obesity rate by census tract: CDC 500 cities project, 2015. Major supermarkets, corner stores, other food stores: multiple sources including, USDA, SNAP retailer locator, 2017; USDA, Food and Nutrition Service, 2016; OCHD Bureau of Surveillance and Statistics. Farmers markets, mobile farmers markets, Syracuse City School District buildings: OCHD Bureau of Health Promotion.

16,428 Residents

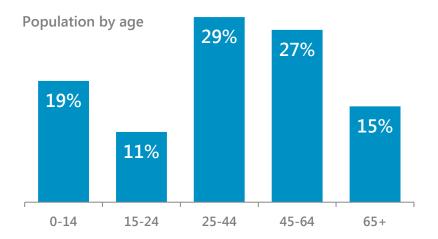
Population by race*



2% Asian 2% Other

5%

Hispanic ethnicity



\$38,264

Median household income

21%

Living in poverty

36%

Children living in poverty

18%

Households with no vehicle available

19%

Households with SNAP benefits†



% of population born outside the United States

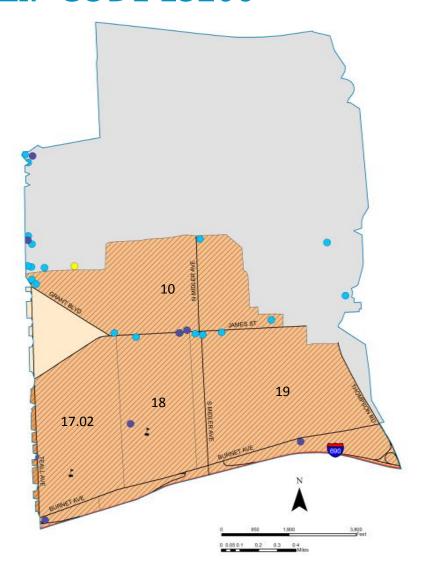
7%

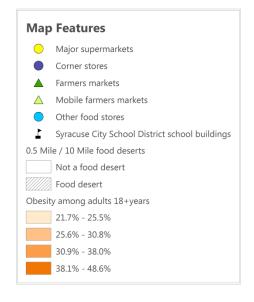


% of adults with less than a high school degree

% of population 16+years living with a disability

⁺SNAP is an abbreviation for Supplemental Nutrition Assistance Program





26
SNAP retailers
28
Fast food restaurants
13
Full-service restaurants

	13206	Best-performing zip code	Worst-performing zip code
Diabetes	21.9	19.3	53.1
hospitalization	(Ranks 2 nd)	(13224)	(13205)
Hypertension	2.4	2.4	9.8
hospitalization	(Ranks 1 st)	(13206)	(13205)
Heart failure	26.0	26.0	80.1
hospitalization	(Ranks 1 st)	(13206)	(13202)

Sources: SNAP retailers: USDA, SNAP retailer locator, 2017. Fast food restaurants and full-service restaurants: US Census Bureau, County Business Patterns, 2015. Health Outcomes: New York Statewide Planning and Research Cooperative System, 2012-2014.

Map Sources: Food desert census tracts: USDA, Food Access Research Atlas, 2015. Adult obesity rate by census tract: CDC 500 cities project, 2015. Major supermarkets, corner stores, other food stores: multiple sources including, USDA, SNAP retailer locator, 2017; USDA, Food and Nutrition Service, 2016; OCHD Bureau of Surveillance and Statistics. Farmers markets, mobile farmers markets, Syracuse City School District buildings: OCHD Bureau of Health Promotion.

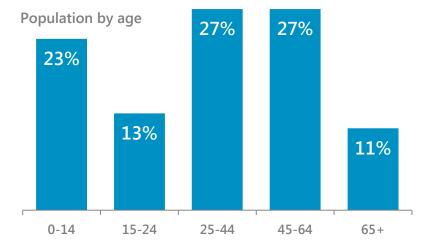
13,110 Residents

Population by race*



1% Asian 2% Other

7% Hispanic ethnicity



\$44,741
Median household income

23%
Living in poverty

37%
Children living in poverty

17%
Households with no vehicle available

25%





5%



Households with SNAP benefits†

% of adults with less than a high school degree

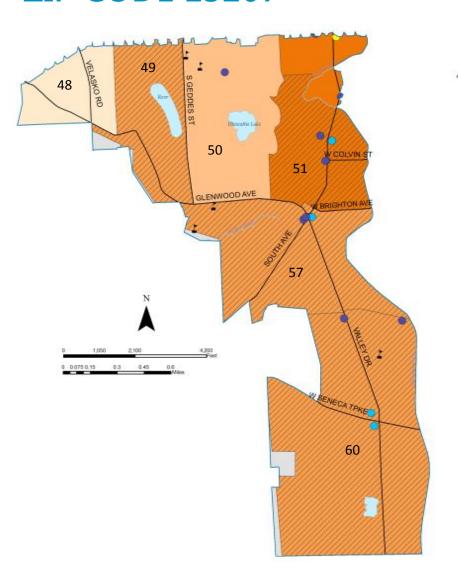
% of population 16+years living with a disability

[†]SNAP is an abbreviation for Supplemental Nutrition Assistance Program

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ZIP CODE 13207

Rates are per 10,000 population 18+years



	Major supermarkets
	Corner stores
	Farmers markets
	Mobile farmers markets
	Other food stores
1	Syracuse City School District school buildings
0.5 M	file / 10 Mile food deserts
	Not a food desert
	Food desert
Obes	ity among adults 18+years
	21.7% - 25.5%
	25.6% - 30.8%
	30.9% - 38.0%
	38.1% - 48.6%

11 SNAP retailers

5

Fast food restaurants

1

Full-service restaurants

	13207	Best-performing zip code	Worst-performing zip code
Diabetes hospitalization	38.5 (Ranks 5 th)	19.3 (13224)	53.1 (13205)
Hypertension hospitalization	6.6 (Ranks 3 rd)	2.4 (13206)	9.8 (13205)
Heart failure hospitalization	45.2 (Ranks 5 th)	26.0 (13206)	80.1 (13202)

Sources: SNAP retailers: USDA, SNAP retailer locator, 2017. Fast food restaurants and full-service restaurants: US Census Bureau, County Business Patterns, 2015. Health Outcomes: New York Statewide Planning and Research Cooperative System, 2012-2014.

Map Sources: Food desert census tracts: USDA, Food Access Research Atlas, 2015. Adult obesity rate by census tract: CDC 500 cities project, 2015. Major supermarkets, corner stores, other food stores: multiple sources including, USDA, SNAP retailer locator, 2017; USDA, Food and Nutrition Service, 2016; OCHD Bureau of Surveillance and Statistics. Farmers markets, mobile farmers markets, Syracuse City School District buildings: OCHD Bureau of Health Promotion.

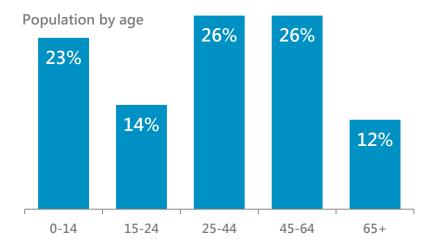
22,353 Residents

Population by race*



17% Asian 3% Other

8% Hispanic ethnicity



\$32,526

Median household income

34% Living in poverty

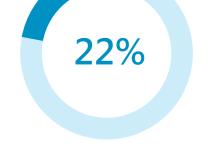
51% Children living in poverty

31%

Households with no vehicle available

34% Households with SNAP benefits†







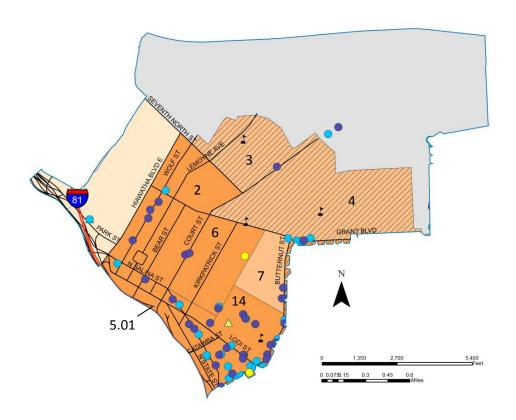
% of population 16+years living with a disability

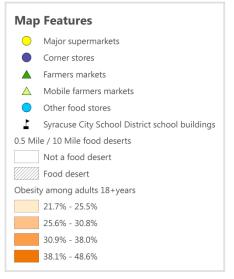
% of population born outside the United States

% of adults with less than a high school degree

[†]SNAP is an abbreviation for Supplemental Nutrition Assistance Program

Rates are per 10,000 population 18+years





64

SNAP retailers

15

Fast food restaurants

15

Full-service restaurants

Health Outcomes		_	
	13208	Best-performing	Worst-performing
		zip code	zip code
Diabetes	33.7	19.3	53.1
hospitalization	(Ranks 3 rd)	(13224)	(13205)
Hypertension	5.1	2.4	9.8
hospitalization	(Ranks 2 nd)	(13206)	(13205)
Heart failure	38.6	26.0	80.1
hospitalization	(Ranks 3 rd)	(13206)	(13202)

Sources: SNAP retailers: USDA, SNAP retailer locator, 2017. Fast food restaurants and full-service restaurants: US Census Bureau, County Business Patterns, 2015. Health Outcomes: New York Statewide Planning and Research Cooperative System, 2012-2014.

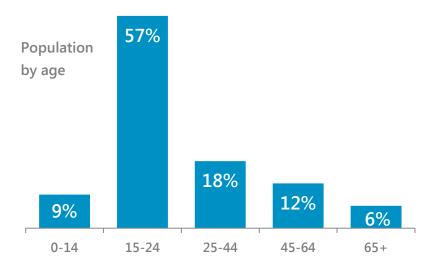
Map Sources: Food desert census tracts: USDA, Food Access Research Atlas, 2015. Adult obesity rate by census tract: CDC 500 cities project, 2015. Major supermarkets, corner stores, other food stores: multiple sources including, USDA, SNAP retailer locator, 2017; USDA, Food and Nutrition Service, 2016; OCHD Bureau of Surveillance and Statistics. Farmers markets, mobile farmers markets, Syracuse City School District buildings: OCHD Bureau of Health Promotion.

27,737 Residents

Population by race*



6% Hispanic ethnicity



\$25,229

Median household income

48% Living in poverty

45%

Children living in poverty

26%
Households with no vehicle available

21%
Households with
SNAP benefits†





3% Other



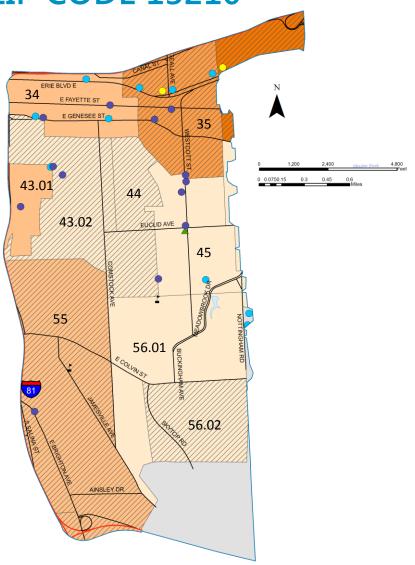
% of population 16+years living with a disability

% of population born outside the United States

% of adults with less than a high school degree

⁺SNAP is an abbreviation for Supplemental Nutrition Assistance Program

Rates are per 10,000 population 18+years



Map	Features
	Major supermarkets
	Corner stores
	Farmers markets
	Mobile farmers markets
	Other food stores
1	Syracuse City School District school buildings
0.5 M	ile / 10 Mile food deserts
	Not a food desert
	Food desert
Obesi	ty among adults 18+years
	21.7% - 25.5%
	25.6% - 30.8%
	30.9% - 38.0%
	38.1% - 48.6%

18

SNAP retailers

26

Fast food restaurants

21

Full-service restaurants

	13210	Best-performing zip code	Worst-performing zip code
Diabetes hospitalization	40.6 (Ranks 6 th)	19.3 (13224)	53.1 (13205)
Hypertension hospitalization	8.2 (Ranks 5 th)	2.4 (13206)	9.8 (13205)
Heart failure hospitalization	45.5 (Ranks 6 th)	26.0 (13206)	80.1 (13202)

Sources: SNAP retailers: USDA, SNAP retailer locator, 2017. Fast food restaurants and full-service restaurants: US Census Bureau, County Business Patterns, 2015. Health Outcomes: New York Statewide Planning and Research Cooperative System, 2012-2014.

Map Sources: Food desert census tracts: USDA, Food Access Research Atlas, 2015. Adult obesity rate by census tract: CDC 500 cities project, 2015. Major supermarkets, corner stores, other food stores: multiple sources including, USDA, SNAP retailer locator, 2017; USDA, Food and Nutrition Service, 2016; OCHD Bureau of Surveillance and Statistics. Farmers markets, mobile farmers markets, Syracuse City School District buildings: OCHD Bureau of Health Promotion.

8,628 Residents

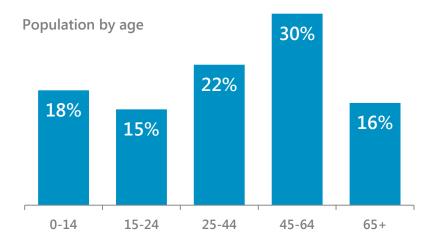
Population by race*



5% Asian 2% Other

4%

Hispanic ethnicity



\$51,591

Median household income

18%

Living in poverty

26%

Children living in poverty

14%

Households with no vehicle available

20%

Households with SNAP benefits†





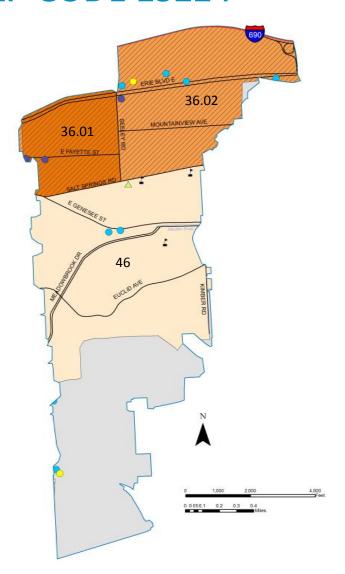


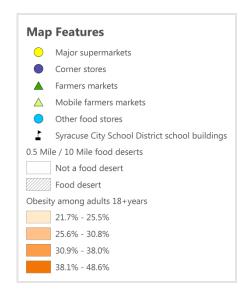
% of population 16+years living with a disability

% of population born outside the United States

% of adults with less than a high school degree

[†]SNAP is an abbreviation for Supplemental Nutrition Assistance Program





12
SNAP retailers
8
Fast food restaurants
12
Full-service restaurants

	13224	Best-performing zip code	Worst-performing zip code
Diabetes	19.3	19.3	53.1
hospitalization	(Ranks 1 st)	(13224)	(13205)
Hypertension hospitalization	†	2.4	9.8
		(13206)	(13205)
Heart failure	26.2	26.0	80.1
hospitalization	(Ranks 2 nd)	(13206)	(13202)

Sources: SNAP retailers: USDA, SNAP retailer locator, 2017. Fast food restaurants and full-service restaurants: US Census Bureau, County Business Patterns, 2015. Health Outcomes: New York Statewide Planning and Research Cooperative System, 2012-2014.

Map Sources: Food desert census tracts: USDA, Food Access Research Atlas, 2015. Adult obesity rate by census tract: CDC 500 cities project, 2015. Major supermarkets, corner stores, other food stores: multiple sources including, USDA, SNAP retailer locator, 2017; USDA, Food and Nutrition Service, 2016; OCHD Bureau of Surveillance and Statistics. Farmers markets, mobile farmers markets, Syracuse City School District buildings: OCHD Bureau of Health Promotion.

Discussion

As seen above and in Appendix A, disparities exist throughout the City with respect to the food environment, with zip codes 13202 and 13204 encompassing some of the highest risk areas in Syracuse. Known as downtown and the near west side, these two zip codes have the poorest health outcomes and the highest rates of poverty among children, and are among the least likely to have a household vehicle available.

Zip code 13202 includes a farmer's market and three mobile markets, and 13204 includes three full-service supermarkets, more than are found in some other areas of the City. However, while healthy food offerings are available, the most vulnerable residents may be unable to regularly access these opportunities. Conversely, in these two zip codes combined there is a corner store for every 573 residents. This is the highest rate in the City by far. As corner stores generally offer non-perishable, processed foods, the high density of this type of food source can have an impact on the nutritional health indicators in these areas. A survey² conducted in October 2016 of YMCA residents (13202) found that superstores (43%), locally owned grocery stores (40%) and drugstores (40%) were the three most common locations that respondents shopped for groceries. Respondents were most likely to get their groceries home by walking (51%), taking the bus (40%), or riding with another person (37%).

Another high risk area is zip code 13205, which is on the City's south side. Here, 5 out of 7 (71%) census tracts are considered food deserts, and 5 out of 7 census tracts have obesity rates of 31% or greater. Health outcomes are poor, and the rate of poverty is high. While 13205 does contain three mobile markets and three major supermarkets, two of the supermarkets are outside the City boundary and more than 30% of households have no vehicle available. There are 17 corner stores in 13205, or one corner store for every 1,100 residents.

Zip code 13207, on the City's south side, encompasses several diverse neighborhoods. With only one major supermarket and no mobile farmer's markets, this area experiences a lower density of healthy food sources per capita compared to other parts of the City. While overall 13207 has a lower rate of poverty and higher median household income than some other City zip codes, 71% of census tracts have obesity rates of 31% or higher, and 57% of census tracts are considered food deserts.

In July 2016, the OCHD Healthy Neighborhood Program added several questions to the routine survey administered to their clients, to assess access to health care, healthy foods, and opportunities for exercise and play. Clients in census tracts 51 (13207) and 53 (13205) completed the survey. While only 2% of respondents felt that it was difficult to get fresh and healthy foods close to where they lived, 39% cited cost and 12% cited transportation as their biggest problems with getting groceries.

On the north side, residents in zip codes 13203 and 13208 also struggle. As home to much of the City's refugee population, residents in these areas are more likely to be foreign born and speak a language other than English at home. There are high rates of children in poverty, and more than 30% of households do not have a vehicle available. There are no major supermarkets in 13203, and only one in 13208. In 13208, there is a corner store for every 657 residents.

² Invest Health Downtown Food Access Survey. Developed and implemented by the Downtown Committee and other community partners, including the OCHD in October and November, 2016.

The remaining zip codes, 13206, 13210 and 13224, are better positioned to address food environment challenges. For example, nearly the entirety of zip code 13206 that falls within the City boundary is considered a food desert. However, over 80% of households have access to a vehicle, and health outcomes for these residents are much better compared to other zip codes.

In August 2016, a community wide survey³ was conducted to obtain feedback on health problems in Onondaga County. Respondents in every Syracuse zip code cited obesity in adults and/or children as one of the top five health problems in the community. Every zip code except 13202, 13204 and 13208 identified unhealthy eating as one of the top five behaviors that impact health. Respondents were also asked to identify the features of a healthy community, and residents of zip codes 13204, 13205, and 13210 chose access to fresh and healthy foods as one of the top five features.

Limitations

Sources of food are constantly changing as venues move, open and close. The maps included in this report were accurate at the time they were published, but it is likely that as time passes discrepancies will be identified. In addition, people don't necessarily purchase food from the location closest to their home; though with nearly 30% of households City-wide having no vehicle available, proximity is likely a major a factor in where food is accessed. Finally, food environments can be highly localized. By providing a zip code level assessment, variations between different neighborhoods within a zip code could be missed. The surveys conducted by Invest Health and the OCHD Healthy Neighborhood program were not representative of the entire population residing in those census tracts.

Conclusion and Next Steps

This report illustrates that simply bringing healthy food opportunities to high risk areas is not sufficient to improve health status; the barriers to accessing this food must also be addressed. The indicators reviewed in this report show that differences in health between zip codes are impacted by social, economic, and environmental conditions. Supporting healthy food initiatives can enhance health equity in a community. To achieve health equity, all people must have "full and equal access to opportunities that enable them to lead healthy lives", which happens only when all avoidable health inequities and disparities have been eliminated⁴. While much remains to be done, important work is underway to improve the food environment in underserved areas. More information on these efforts can be found in the Onondaga County Community Health Assessment and Improvement Plan. Future versions of this report may involve repeating the analysis at the census tract level, and including information on the number of residents living in food deserts. Certain health indicators may not be available at the census tract level for comparison, but demographic, economic, and food environment data can still be analyzed. The format of the report may change to allow for improved interactivity of the maps. Future reports could also broaden food sources to include data points on food pantries and community gardens, in order to gain a more comprehensive view of food access points.

³ Onondaga County Community Engagement Survey. August 2016. http://www.ongov.net/health/documents/SurveyExecutiveSummary.pdf

⁴ Health Equity Institute: Defining Health Equity. https://healthequity.sfsu.edu/content/defining-health-equity. Accessed 5/17/17.

Appendix A. Zip Code Charts

Zip Code	13202	13203	13204	13205	13206	13207	13208	13210	13224	Syracuse
Population	5,878	16,406	19,896	18,729	16,428	13,110	22,353	27,737	8,628	144,564
White*	33.8%	60.0%	65.4%	36.1%	79.7%	55.5%	60.7%	64.7%	56.2%	58.3%
Black*	53.2%	26.5%	27.3%	58.4%	15.9%	41.3%	18.6%	20.7%	37.3%	31.0%
Asian*	7.8%	8.1%	1.2%	2.6%	2.1%	1.2%	17.4%	11.3%	4.9%	7.0%
Other race*	5.2%	5.3%	6.1%	2.9%	2.3%	2.0%	3.3%	3.3%	1.6%	3.7%
Hispanic ethnicity	10.7%	9.2%	15.6%	6.9%	5.3%	7.3%	7.6%	6.4%	4.2%	8.4%
Ages 0-14 years	24.1%	20.6%	22.1%	21.0%	18.8%	23.1%	22.8%	8.6%	18.3%	19.1%
Ages 15-24 years	16.5%	15.2%	15.5%	14.9%	10.7%	12.5%	13.7%	56.5%	14.5%	22.2%
Ages 25-44 years	36.0%	27.7%	31.5%	24.2%	29.3%	26.6%	26.0%	17.6%	22.2%	25.9%
Ages 45-64 years	19.0%	21.4%	21.9%	23.4%	26.5%	26.5%	25.6%	11.8%	29.5%	21.5%
Ages 65+ years	4.3%	15.1%	9.0%	16.5%	14.7%	11.3%	11.9%	5.6%	15.5%	11.3%
Born outside the United States	16.7%	17.5%	6.2%	7.1%	6.8%	5.1%	21.6%	13.0%	10.2%	11.9%
Living with a disability (aged 16+ years)	14.2%	13.7%	15.0%	13.7%	11.4%	11.7%	12.6%	5.6%	10.4%	11.6%
Below poverty level	56.0%	36.3%	39.6%	33.9%	21.4%	23.3%	34.2%	47.9%	17.5%	34.8%
Children below poverty level	68.4%	57.5%	57.8%	49.6%	36.0%	37.3%	51.2%	44.9%	25.8%	49.6%
Median household income	\$15,565	\$30,731	\$28,220	\$30,284	\$38,264	\$44,741	\$32,526	\$25,229	\$51,591	\$31,881
Households with SNAP benefits	48.0%	33.2%	40.4%	35.6%	19.0%	25.3%	34.3%	21.0%	19.8%	30.7%

Households with no vehicle available	49.9%	36.5%	34.2%	31.6%	17.7%	16.7%	30.9%	26.3%	13.6%	28.8%
Adults with less than high school degree	26.7%	23.3%	26.2%	23.2%	13.5%	13.3%	26.1%	5.4%	11.5%	17.8%

Source: U. S. Census Bureau, American Community Survey, 2011-2015, 5 year estimates

Zip Code	13202	13203	13204	13205	13206	13207	13208	13210	13224	Syracuse
SNAP retailers	14	16	43	31	26	11	64	18	12	+
Fast food restaurants	22	5	21	10	28	5	15	26	8	+
Full-service restaurants	38	9	22	0	13	1	15	21	12	†
Diabetes Hospitalization*	48.9	36.4	51.1	53.1	21.9	38.3	33.7	40.3	19.3	†
Hypertension Hospitalization*	+	7.2	8.7	9.8	2.4	6.6	5.1	8.2	†	†
Heart Failure Hospitalization*	80.1	43.9	70.9	63.8	26.0	45.2	38.6	45.5	26.2	†

Source: New York Statewide Planning and Research Cooperative System, 2012-2014

[†]Data are not available for that geography

Zip Code	13202	13203	13204	13205	13206	13207	13208	13210	13224	Syracuse
% of census tracts* defined as food deserts	50.0%	42.9%	22.2%	71.4%	100.0%	57.1%	28.6%	55.6%	66.7%	50.9%
% of census tracts* with obesity rates of 31% or higher	50.0%	71.4%	66.7%	71.4%	0.0%	71.4%	57.1%	11.1%	66.7%	52.7%

^{*}Census tracts were counted if the majority of the tract fell within the specified zip code

Source: CDC 500 Cities Project, 2015

^{*}Among individuals reporting one race

^{*}Rate per 10,000 population 18+years